

YANTRADNYA

NEW

NEWSLETTER ●

MAY 23

● ISSUE 13

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THIS
ISSUE

THE NEWSLETTER OF
DEPARTMENT
OF MECHANICAL ENGINEERING

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Corner



● MECHANICAL DEPARTMENT ●

ABOUT US...

VISION

To aspire for the welfare of society through excellence in Science and Technology.

MISSION

To develop professional skills through student centric activities and the industry interactions.

To prepare students for higher education, research and innovation.

To make globally competent and socially committed Mechanical Engineers with morals and ethical values.

MECHANICAL ENGINEERING IS ONE OF THE BASIC & MOST DIVERSE AND ENGINEERING BRANCH THAT TOUCHES VIRTUALLY EVERY ASPECT OF MODERN LIFE, INCLUDING THE HUMAN BODY & HIGHLY COMPLEX MACHINES, THE ROLE OF A MECHANICAL ENGINEER IS TO TAKE A PRODUCT FROM AN IDEA TO THE MARKETPLACE. MECHANICAL ENGINEERS PLAY KEY ROLES IN A WIDE RANGE OF INDUSTRIES INCLUDING AUTOMOTIVE, AEROSPACE, BIOTECHNOLOGY, COMPUTERS, ELECTRONICS, ROBOTICS & AUTOMATION, MICROELECTROMECHANICAL SYSTEMS, ENERGY CONVERSION AND MANUFACTURING. MECHANICAL ENGINEERING DEPARTMENT IS ONE OF THE FINEST AND BIGGEST DEPARTMENTS OF THE INSTITUTE ESTABLISHED IN 2006 WITH THE PRESENT INTAKE OF 120 STUDENTS FOR UG PROGRAMME. THE DEPARTMENT IS VERY WELL EQUIPPED WITH WORKSHOPS, LABORATORIES, DEPARTMENTAL LIBRARY AND DIGITAL LIBRARY FACILITIES. THE CLASSROOMS ARE WELL DESIGNED ROOMS THAT INCORPORATE EVERYTHING NEEDED FOR A PLEASANT LEARNING ATMOSPHERE. IT PERSISTENTLY SEEKS AND ADOPTS INNOVATIVE METHODS TO IMPROVE THE QUALITY OF EDUCATION ON A CONSISTENT BASIS. QUALIFIED AND EXPERIENCED FACULTIES ARE STRONGLY ENCOURAGED TO NURTURE THE STUDENTS. REALIZING THE IMPORTANCE OF LEARNING BEYOND CLASSROOMS, THE DEPARTMENT ENCOURAGES STUDENTS TO INDULGE IN CO-CURRICULAR ACTIVITIES. DEPARTMENT HAS ESTABLISHED STUDENT CHAPTERS IN ASSOCIATION WITH INTERNATIONAL & NATIONAL PROFESSIONAL BODIES LIKE SAEINDIA, ISHRAE, ASHRAE, ISTE, QCFI ETC.

FROM HOD'S DESK



DR.V.R DEULGAONKER
PROFESSOR & HEAD

Welcome to the Department of Mechanical Engineering of Marathwada Mitra Mandal's College of Engineering Karvenagar, Pune. We started our journey in the year of 2006. Over the last fifteen years, we have grown our expertise & competence in the core Mechanical Engineering curriculum.

The primary focus of our curriculum is to impart technical know-how to students, promote their problemsolving skills & innovation of new technologies. The students are encouraged to undertake various research projects..

We have state of the art research facilities in the constitution with industry to support our academic programs. Our department has a distinguished record in both teaching & research. Faculty members have excellent academic credentials & are highly regarded. Our department looks forward to contributing to solving the technological challenges of the society with active participation from all sections of the society.

The goal of this newsletter is to keep you updated with developments in Mechanical Engineering Department of MMCOE. This department is continuously undergoing transformation. New initiatives has been launched related to academics, student affairs', research and extra curricular activities.

The students & faculty members of the department are sincerely participating in various activities organized at institute or at other places. It is elevating to see the sound performance of students. I offer best wishes for future activities. At last, I thank to the editors of YANTRADNYA for their sincere efforts & I offer my best wishes to the readers of this newsletter.

EDITORIAL

It brings me immense joy & pleasure to introduce the thirteenth edition of the departmental newsletter 'YANTRADNYA'. All the creative energies that came on to this

platform in the form of faculty experts & students are finally presenting a replica of their enthusiastic hard work through this extravaganza that has come out so organically.

Technical & Arts every section shines out differently in its true sense. All the events conducted throughout the year were perfectly planned & executed & the overwhelming response it received said it all! This piece of art would not have been complete without the sheer determination & perseverance of all the students who pushed their limits every time to bring out this artistic reality. Their efforts coupled with immense support from the faculties truly have done justice to carry on the legacy. I am grateful for all the support YANTRADNYA has received throughout the year in every possible way from the faculties & Students. I hope the readers of the newsletter have a wonderful reading experience & wish this year's edition too receives your love & support like it has always received till date.



MRS. MAYURI P. RODE
CHIEF EDITOR

There is no denying that one day my memory of words will turn vague but every page of this newsletter will open a box of memory so vivid! Filled with hard work, dedication & limitless time put in making this one book that I will always be grateful to "YANTRADNYA" will make you fall in love with drawings again! It gives me immense pleasure to bring to you an extraordinary & masterly collection of the events, activities, achievements, highlights at the college presented in the 11th Annual departmental newsletter "YANTRADNYA- 2022" Issue 13



CHIRAG JAIN
CONTENT EDITOR

The newsletter reflects the identity of MMCOE as well as gives the students & teachers a platform to explore their creativity & imagination. This work is a result of the various phases from planning to data collection to segregation to organization to proofreading to designing. I take this opportunity to express my gratitude to our HOD Dr.V.R.Deulgaonker professor & head & Mrs. Mayuri P. Rode for their constant assistance & guidance. My sincerest thanks to all the captains, heads, mentors & the teams without whom this newsletter would have just been a dream. Last but the most important, you, the readers, YANTRADNYA would not have been what it is today without you. So, as you turn through the pages, I hope you like the curation of emotions, fervor, faith, ideas & aspirations expressed in words.

PROGRAM EDUCATIONAL OBJECTIVES

PROGRAM EDUCATIONAL OBJECTIVES (PEO'S)

Graduates from our department will

- studies, research & industries.
- Become competent engineers for successful career in higher
- Acquire knowledge based skills to solve the problems in mechanical engineering & related fields.
- Achieve professional ethics & managerial skills.
- Respond to growing demands of society through lifelong learning and extension.



DEPARTMENT ACTIVITY



ADD ON COURSES

- Skill Development program on Python and machine learning
- PLC programming
- MD Solids 4.0
- English communication, aptitude test and verbal nonverbal communication.
- CNC programming on Multi Axis Machining center
- German Language
- Geometric Dimensioning & Tolerance
- Next generation of product design using Inspire solid Thinking
- Value added program on automation studio software

PROMINENT LABS

- Measurement & Metallurgy Lab
- Refrigeration & Air Conditioning Lab
- Solid mechanics
- Kinematics & Dynamics Lab
- Computer Aided Design Lab
- Computer Aided Engineering Lab
- Fluid Mechanics & Heat Transfer Lab
- Fluid Power & Mechatronics Lab
- Skill development Lab
- Work Shop

GUEST LECTURER



- Dr. Anirban Sur, Prof at Symbiosis Institute of Technology, Pune, ISHRAE CWC Members: Mr Nandkishor Kotkar, Mr Vimal Chavada for Expert Lecture on 'Applications of Heat Transfer in Modern Appliances' on 19/11/2022 (Total 170 students, TE)
- Dr. Tushar Jadhav, Associate Professor, School of Project management at NICMAR for Expert talk on 'Project Management for HVAC' on 15/11/2022. (Total students-113)
- Mr. Atul Chavan, Technical Lead onward Technology Ltd, Pune for Expert Lecture on Matlab and Job opportunities on 19/11/2022. (Total students-113)
- Mr. Atul Chavan, Technical Lead onward Technology Ltd, Pune for Expert Lecture on Recent trends in Industrial Automation on 19/11/2022. (Total students-170)
- Mr. S S Bhosale Director, Vector Academy Expert Lecture on Applications in solid mechanics on 26/11/2022. (Total students-84)



GPS Map Camera



Pune, Maharashtra, India

Survey no 19 plot no 20, State Bank Nagar, Hingane Home Colony, Karve Nagar, Pune, Maharashtra 411052, India

Lat 18.490348°

Long 73.810476°

15/11/22 09:51 AM GMT +05:30

NATIONAL AND INTERNATIONAL COLLABORATIONS



PROF. SREEDHARA SHESHADRI, HEAD IIT, BOMBAY



Outcome

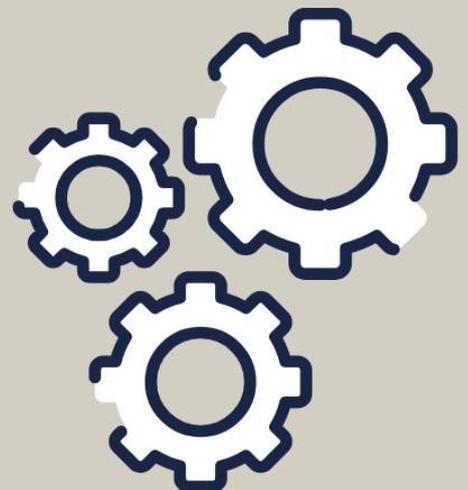
IIT Bombay faculty Dr. Neeraj Kumbhakarna accepted the invitation to be a Department Advisory Board Member



AUTOMATION LABORATORY VISIT IIT, BOMBAY



NATIONAL AND INTERNATIONAL COLLABORATIONS



ESTABLISH INTERNATIONAL COLLABORATION



**DR. RASHMI
WALVEKAR
VISITED
MMCOE
CAMPUS IN
2019**

**UNIVERSITY:
XIAMEN
UNIVERSITY,
MALAYSIA;
FACULTY:
DR. RASHMI
WALVEKAR:**



**DR. SACHIN
SHENDOKAR
VISITED
DEPARTMENT
OF
MECHANICAL
ENGINEERING**

MESA



...aharashtra, India
...Plot No. 5/3, CTS No.205, behind Vandevi temple
... Karve Nagar, Pune, Maharashtra 411052, I
...PM



...aharashtra, India
...Plot No. 5/3, CTS No.205, behind Vandevi temple
... Karve Nagar, Pune, Maharashtra 411052, I
...PM



Pune, Maharashtra, India
...RX6+2GH, Lane No. 8, Dahanuka
...aharashtra 411052





MOU WITH INDUSTRY

- Mechatol Product Engineering Solutions, Private Limited (Fully sponsored product development centre)
- PMS Robotics Research Center
- **Department activity**
- Session on Higher Education in Netherlands by Mr. Asit Kishor Mungle on 18th April 2023
- ISHRAE MMCOE student chapter has organized three days internship for DSK School 10th class students from 17 th April to 19 th April 2023.
- Overseas Education Consultancy services in Association with MMCOE, International Collaboration Cell (ICC) Present seminar on 'How to Prepare for your English Language proficiency for TOEFL? On 4/07/2022.

FACULTY ACHIEVEMENTS

1. Prof.R.S.Yadav has been awarded Ph. D. Degree in Mechanical Engineering by K.L University, Vijaywada.(2022)
2. Prof.V.N.Naikwadi Published book on "Product design and development " for final year course (B.E.)degree course in Mechanical and Automobile engineering in Nirali Publication under SPPU syllabus.

STUDENT ACHIEVEMENTS

1. Babrekar Vaibhav Pramod Runner-Up position In Ideastorm.
2. Washimkar Aamod Vivek secured NCC 'B' Certificate Examination.
3. Washimkar Aamod Vivek secured third Prize In Table Tennis Competition.
4. Vishrup Aditya Hanumant secured 3rd Rank in Shart Tank Dexterity 2k22-23(National level event)
5. Vishrup Aditya Hanumant Patent Registration- Development Of Innovative. Rechargeable Vein Detector Wrist Band Mechanism
6. Amod Washimkar Winning 3 rd Prize in "Table tennis Competition" held by the officer of the Commissioner of Income Tax (TDS), Pune during the celebration of AzadikaAmrit Mahotsav,25/08/2022
7. SamipKatwate,AniketMandge,AkashPatil,YashMakodePublished paper on "Failure Analysis of Leaf spring Used in Transport Utility Vehicles" in springer journals on 18 th September 2022.<https://doi.org/10.1007/s11668-0220-01470-1>.
8. Shruti Dhokala, Sakshi Pandit,Shrutika Gunda,Sajal Satav Published Patent on Design and development of smart grass cutter with pesticide spray using microcontroller. Application No./Patent No.- 202221052948,DOP-11/10/22.
9. Amar Meherkar, Gaurav Sonone, Ashutosh Damdar, Vedant Shind published on Design and development of innovative diffuser assembly for commercial cooling system. Application No./Patent No.- 202221062445,DOP-11/11/22.

STUDENT CLUB ACTIVITY

2022-23

ROBOCON TEAM RUDRA 2022



**WON THE
ASHOKA
AWARD FOR
BEST
AESTHETICS
ALONG WITH A
CASH PRIZE OF
RS.50,000**



Achievements In Robocon 2022

- Scored 82/100 in stage 1.
- Scored 95/100 in stage 2 with an AIR 5 in virtual round.
- Won the Ashoka Award for Best Aesthetics along with a cash prize of Rs.50,000.
- Undefeated Run in League Matches in Final Stage.

STUDENT CLUB ACTIVITY

2022-23

SAE INDIA EFFICYCLE-2022



Congratulations



Team Abhedya

For their incredible performance in ATVC'23.

- ▶ Suspension & Traction AIR 1
- ▶ Maneuverability AIR 3
- ▶ Acceleration AIR 3
- ▶ Fastest Lap in Endurance Race
- ▶ Overall AIR 4



Marathwada Mitra Mandal's
College of Engineering Pune.



**WON THE BEST CAE AWARD WITH A
CASH PRIZE OF RS.15,000.**

DEXTERITY EVENT

Date: 18/10/2022

Dexterity is a National Level Technical event which provides platform for students to showcase their technical skills. This Year Mechanical engineering department had organized three events under “**Dexterity 2K22-23**” on **15th October 2022**.

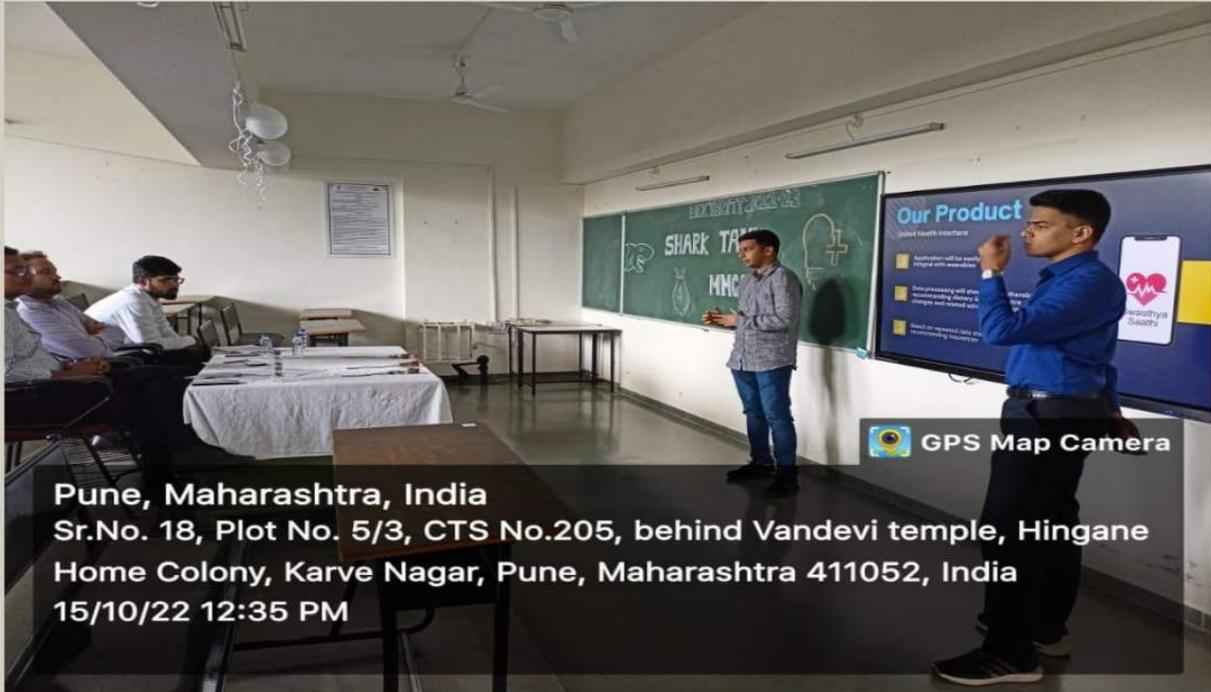
The events hosted by Mechanical engineering department are:

- 1) Mech Mind
- 2) CAD War
- 3) Shark Tank





In **shark tank** event, students had to give the presentation on any business idea. In this event 23 teams participated and presented their business idea including its design, manufacturing, customer requirements, sales, service after sales, etc. The event was coordinated by Prof. PawanKhade and Prof. Kiran Bhoite with 02 student coordinators. For presentation the judge was Mr. Akshay Rasne (TCS Pune).



Pune, Maharashtra, India
Sr.No. 18, Plot No. 5/3, CTS No.205, behind Vandevi temple, Hingane
Home Colony, Karve Nagar, Pune, Maharashtra 411052, India
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Mech Mind

Winner Position	Winner Name	College/ Department
winner	YashSachin Jain	MMCOE, Mechanical
	Pranav Kambale	MMCOE, Mechanical
1st Runner up	Aishwary Piagude	MMCOE, Mechanical
2nd Runner up	AvdhutJori	MMCOE, Electrical
	ChavanMangesh	MMCOE, Mechanical

Shark Tank

Winner Position	Winner Name	College/ Department
Winner	Deshpande Atharv and	MMCOE, Mechanical
	Bhagwat Sujay	MMCOE, Mechanical
1st Runner up	Yash Jain	MMCOE, Mechanical
	Shewale Pritesh	MMCOE, Electrical
2nd Runner up	Deshmukh Arjun	MMCOE, Mechanical
	Vishrup Aditya	MMCOE, Mechanical

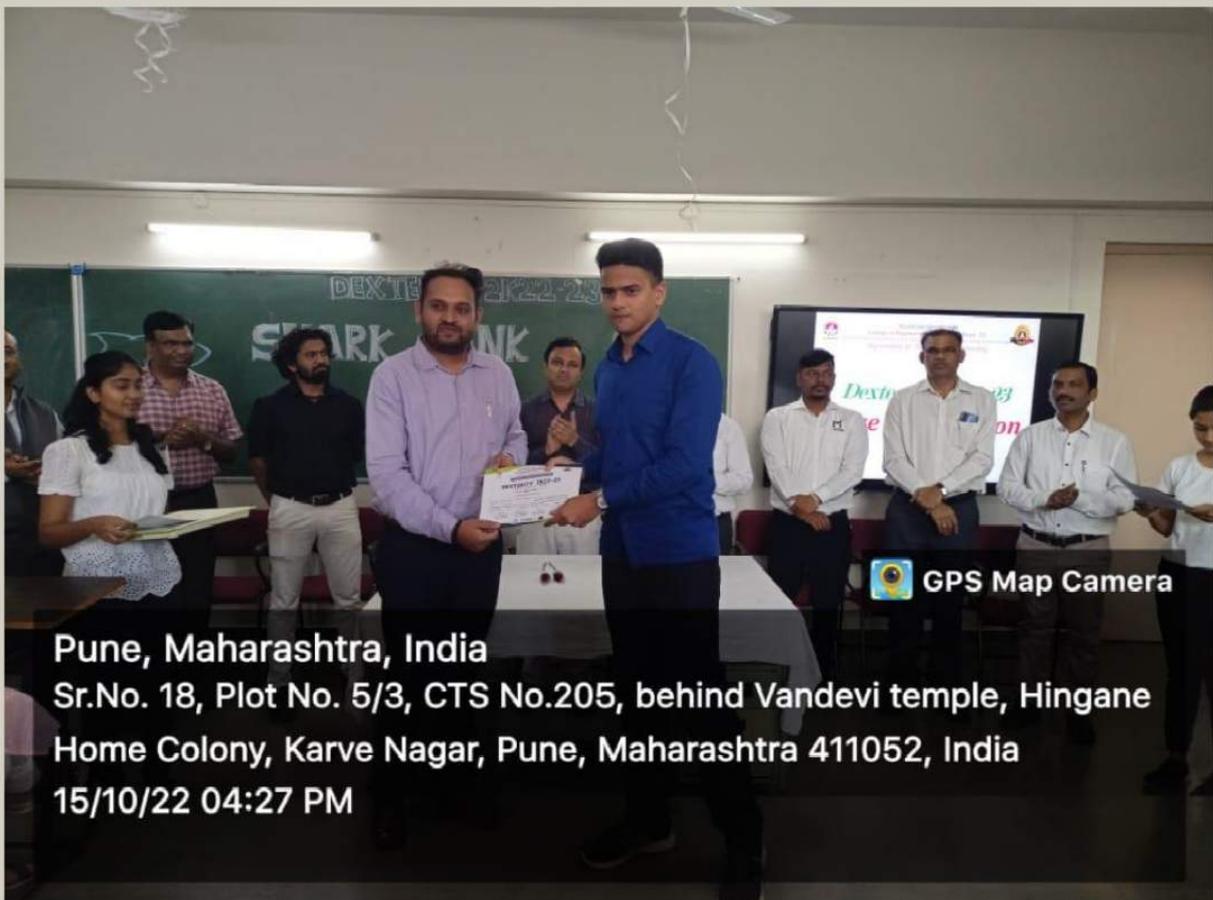
CAD WAR

Winner Position	Winner Name	College/ Department
Winner	Supriya Dharmadhikari	VIIT, Mechanical
1st Runner up	Chinmay Patil	MMCOE, Mechanical
2nd Runner up	Atharva Kadam	MMCOE, Mechanical





Pune, Maharashtra, India
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Pune, Maharashtra, India
Sr.No. 18, Plot No. 5/3, CTS No.205, behind Vandevi temple, Hingane Home Colony, Karve Nagar, Pune, Maharashtra 411052, India
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TOPPERS



Class	Name of Student	Percentage/CGP A	Rank
BE	JAI RUTUJA SUNIL	9.82	1
	LONKAR MIHIR AJIT	9.81	2
	PATIL URJIT RAJENDRA	9.70	3
TE	JAIN YASH SACHIN	9.83	1
	MAHURKAR SAKET ANUTTAM	9.83	1
	ZIRPE SHAMEE SURESH	9.79	2
	ANUJ VIJIT GUPTE	9.76	3
SE	GHATE RAJAS NANDKUMAR	9.50	1
	CHOUDHARY PRADEEP PUKHRAJ	9.25	2
	ZIRPE ATHARVA SURESH	8.98	3

STUDENT SUPPORT...

EXTRA CURRICULAR ACTIVITIES AND SPORTS



1. Savitribai Phule Pune University Inter-zonal sports competition : 01
2. Student Achievements in Pune City Zone Intercollegiate sports competition : 04 (Second Place in Lawn Tennis & Third Place in Table Tennis)

STUDENT SUPPORT...

NSS Activities

1. NSS Unit Strength: 100 students (31 from Mechanical /100)
2. AzadikaAmritMahoatsav (15th August 2022)
3. Celebration of Ganesh Festival (31st August to 6th September 2022)
4. Grocery donation in the memory of Late Shri. VilasraojiDeshmukh (14th August 2022)
5. Voter ID registration camp (25th and 26th November 2022)
6. Conducted workshop on 'Leadership Skills' (29th November 2022)



STUDENT SUPPORT...

*Grocery donation,
Chatrapati Shivaji Maharaj
Jayanti, Plastic waste
collection at Sinhagad fort*



पुलामी

सिंहगडावर १० पोती प्लास्टिकसह कचरा

प्लास्टिकबंदी असतानादेखील पर्यटकांचे कृप्य

वेल्थे : पुढारी वृत्तसेवा

सिंहगड किल्ल्यावर मोठ्या प्रमाणात प्लास्टिकच्या बाटल्या, कचरा असल्याचे गंभीर वास्तव्य पुढे आले आहे.

वार्षिक पर्यटन दिवसीय उपबन्संरक्षक राहुल पाटील यांच्या पुढाकाराने आयोजित करण्यात आलेल्या सिंहगड स्वच्छता अभियानात एकूण १० पोती कचरा गोळा करण्यात आला. त्यात प्लास्टिकचे प्रमाण अधिक होते.

सेवाभावी संस्था, संघटना, चौकसदास्यदास्यून मोठ्यापणा प्रत्येक शनिवारी सिंहगडावर स्वच्छता मोहीम राबविल्यात येणार आहे. काटकी पंचायत व बाल इन्क कृषी यांनी, महासडाहा विस्मंडल फ्रॉन्ट, दुर्गिनी गिरिप्रमल संस्था, मावळा जवान संघटना, चव्हाण संस्थान व संवर्धन संस्था, वन विभाग आदी स्वच्छता मोहिमेत सहभागी झाले होते.

वन विभागाच्या वीड वरिष्ठेक्ष अधिकारी कल्पणी मोहंते यांनी मार्गदर्शन केले. सिंहगड विभागाचे वनशीर्षंडल बाळागोवळ लटके

सिंहगड स्वच्छता मोहिमेत सहभागी गड्डोमी.

वररक्षक बाळागोवळ निवडे, सुनील भोईकर, सागर बावळे, माऊरी पिमाळ, तानाजी भोगले, गुलाब कोटीकर आदी सहभागी झाले होते



STUDENT SUPPORT...

Curricular activities – Students Industrial Visit..



Felidae Electric, Chakan, Pune



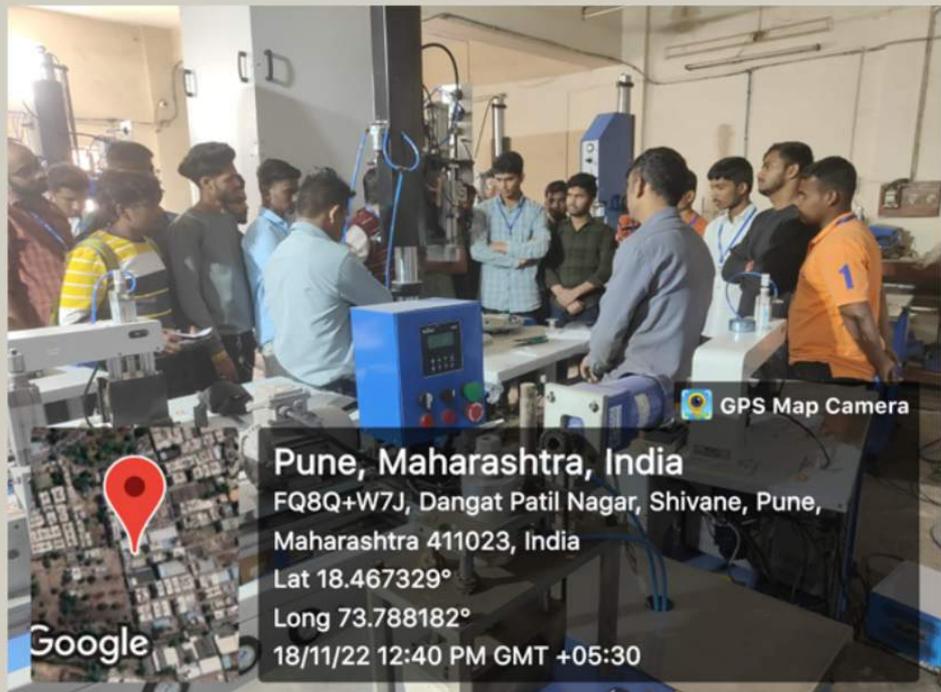
SRS Global Metallurgical Lab, Chakan, Pune

STUDENT SUPPORT...

Curricular activities – Students Industrial Visit..



Carwala Garage, Advanced Car workshop, Pune



Johnson Plastosonic Private limited, Pune

STUDENT SUPPORT...

Curricular activities – Students Industrial Visit..



Mapro Foods, Wai, Satara



Vishwaj Hydro electric power station, Satara.

Global certification courses of students



- 1) FE : Python 3.4.3 - 121
- 2) SE : Qcad -145
- 3) TE : Application of GeoGebra - 222
- 4) BE : Arduino -238



Global certification courses of students (MATLAB)



1) Onramp : 222
2) Fundamentals : 222
3) Data Processing and Visualization: 222 enrolled



Global certification courses of students (Cursa)...





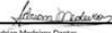
Certificate

We certify that **Arnav Thigale**
has completed the following courses on our platform:



Business Entrepreneurship by CrashCourse
03 hours 20 minutes - From 21/11/2022 to 21/11/2022

Intellectual Property by CrashCourse
01 hours 18 minutes - From 21/11/2022 to 21/11/2022


Adria Medeiros Dantas
Executive Director - Cursa


Student Signature
Arnav Thigale

u1853178

This certificate proves that the student has attended the courses described therein through the Cursa application, which is available in the Google (Google Play) and Apple (App Store) application stores, proving the authenticity of the respective viewing time of the video classes. If you have received this certificate and want to verify that it is authentic, scan the QR code with a cell phone camera or access cursa.app/en/my-certificate and consult the code described in the lower right corner of this certificate.

Responsible for the application: Medeiros Tecnologia LTDA. CNPJ 24.471.978/0001-08.
E-mail: contato@cursa.app



Point the camera to verify authenticity



Certificate

We certify that **Vinit Gunjkar**
has completed the following courses on our platform:



Business Entrepreneurship by CrashCourse
03 hours 20 minutes - From 27/11/2022 to 28/11/2022

Intellectual Property by CrashCourse
01 hours 18 minutes - From 28/11/2022 to 28/11/2022


Adria Medeiros Dantas
Executive Director - Cursa


Student Signature
Vinit Gunjkar

u1868280

This certificate proves that the student has attended the courses described therein through the Cursa application, which is available in the Google (Google Play) and Apple (App Store) application stores, proving the authenticity of the respective viewing time of the video classes. If you have received this certificate and want to verify that it is authentic, scan the QR code with a cell phone camera or access cursa.app/en/my-certificate and consult the code described in the lower right corner of this certificate.

Responsible for the application: Medeiros Tecnologia LTDA. CNPJ 24.471.978/0001-08.
E-mail: contato@cursa.app



Point the camera to verify authenticity

1) Business entrepreneurship: 222
2) Intellectual Property : 222





Certificate

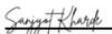
We certify that **Sanjayot Kharde**
has completed the following courses on our platform:



Business Entrepreneurship by CrashCourse
03 hours 20 minutes - From 25/11/2022 to 25/11/2022

Intellectual Property by CrashCourse
01 hours 18 minutes - From 25/11/2022 to 25/11/2022


Adria Medeiros Dantas
Executive Director - Cursa


Student Signature
Sanjayot Kharde

u1865722

This certificate proves that the student has attended the courses described therein through the Cursa application, which is available in the Google (Google Play) and Apple (App Store) application stores, proving the authenticity of the respective viewing time of the video classes. If you have received this certificate and want to verify that it is authentic, scan the QR code with a cell phone camera or access cursa.app/en/my-certificate and consult the code described in the lower right corner of this certificate.

Responsible for the application: Medeiros Tecnologia LTDA. CNPJ 24.471.978/0001-08.
E-mail: contato@cursa.app



Point the camera to verify authenticity

Global certification courses of students (Additional topics)



Total Certifications :
58
Certifications from
Infosys, Google, ARAI
Academy, FMCIII,
Goethe-Institute,
Toyota and Cisco
Networking Academy



Training Activities for Placements



Academic Year	Total students	Students Placed
2022-23	228 (238)	110 ongoing
2021-22	198 (223)	116 (58.6%)
2020-21	238	159 (66.8%)
2019-20	211	143 (67.77)



Training Activities for Placements



ENTREPRENEURSHIP



- Status
- 1) 01 Student completed Google Startup Boot Camp at RMZ Google office Bangalore
 - 2) Activity Conducted: Shark-Tank at Dexterity 2K22-23 (39 Participants)
 - 3) 03 Students participated at Savitribai Phule Pune University Startup Yatra Competition



**EVENT
PHOTOGRAPH
AT GOOGLE
STARTUP
BOOTCAMP &
SAVITRIBAI
PHULE PUNE
UNIVERSITY
START-UP
YATRA
COMPETITION**

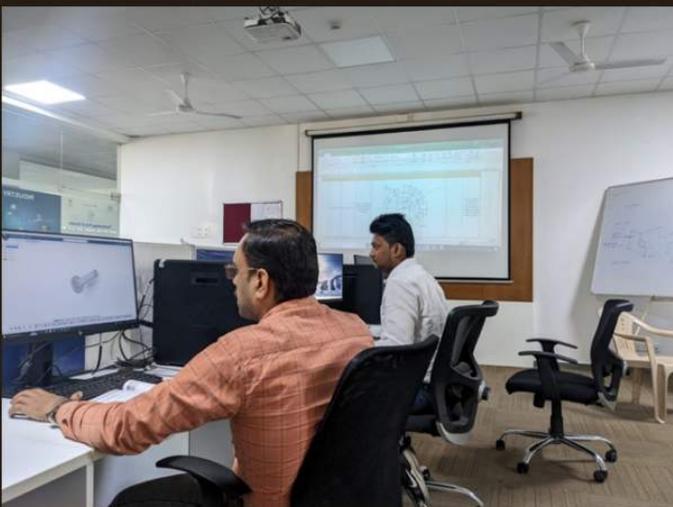
RESEARCH AND DEVELOPMENT

INDUSTRY SPONSORED PRODUCT DEVELOPMENT CENTER



TRAIN FACULTIES PER YEAR UNDER THE 'TRAIN THE TRAINER' PROGRAM

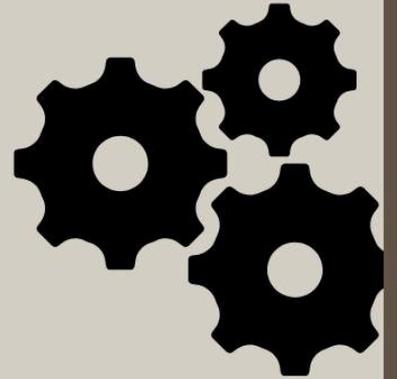
Status	Target fulfilled (100%) 03 : Faculty members assigned for train the trainer program FMCIII course: Additive Manufacturing with Reverse Engineering
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PHOTOGRAPH : MECHANICAL FACULTY UNDERGOING FMCIII HANDS-ON TRAINING



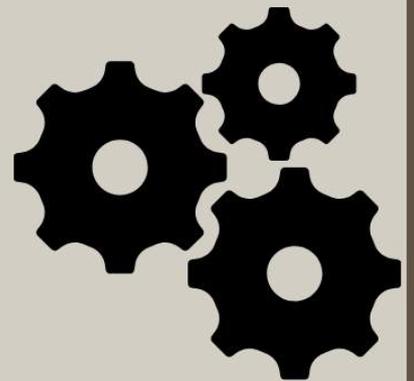
SKILL DEVELOPMENT



ENGLISH
COMMUNICATI
ON AND
APTITUDE TEST
SKILL
DEVELOPMENT
PROGRAM
JOINTLY
CONDUCTED
BY
MECHANICAL
AND
INDUSTRIAL
EXPERTS OF
GLOBAL
TALENT
TRACK.



SKILL DEVELOPMENT



**MD SOLIDS 4.0
PROGRAM
JOINTLY
CONDUCTED
BY
MECHANICAL
ENGINEERING
DEPARTMENT,
AND VECTOR
PUNE.**



UPLIFTMENT OF SOCIETY

Techno-social community activities



Hands-on training
for
Troubleshooting
of four wheelers,
at Shri Saraswati
Vidya Mandir,
Pune



TECHNICAL REPORT

Design and development of vibrating vein finder device with LED impingement.

Abstract: -

The present invention discloses a wrist wearing one of kind vein finder machine. The vein finder consists of universal adjustable wrist with arm band. Arm band equipped with a vibrator assembly on both of hand to activate the vein. Arm band also consist of infrared emitting lights at the periphery of the band surface. The power source for the vibrating band and LED light are given at the bottom of device with rechargeable batteries. When device is attached to the human hand, it vibrates at particular iteration. This vibration stimulates the blood veins which increases the blood flow. The colour light is impinging on wrist or hand surface. Thus the glands in the skin tissues will absorb the light depend on the spectral absorption rate, which in turn influenced by blood flow.

The Invention is one of kind and can reduce effort taken by medical staff to find the vein for different medical activity the present invention is easy to work with and ergonomically safe to work.

The conventional blood vein detecting procedure which is widely used for different clinical trials, has the problem of difficulty in vein finding, particularly for the infants and old age humans. But discover the blood vessel in tissue; regularly is brainstorming work for medical operator; and regarding sufferer for new trainee and leads to painful and uneasy experience; in particular for some; for example: the one-of-a-kind victims such as infants, excessive melanin skin, obese people, old age people, hematoma are carried out in the state of affairs of above-mentioned scientific treatment.

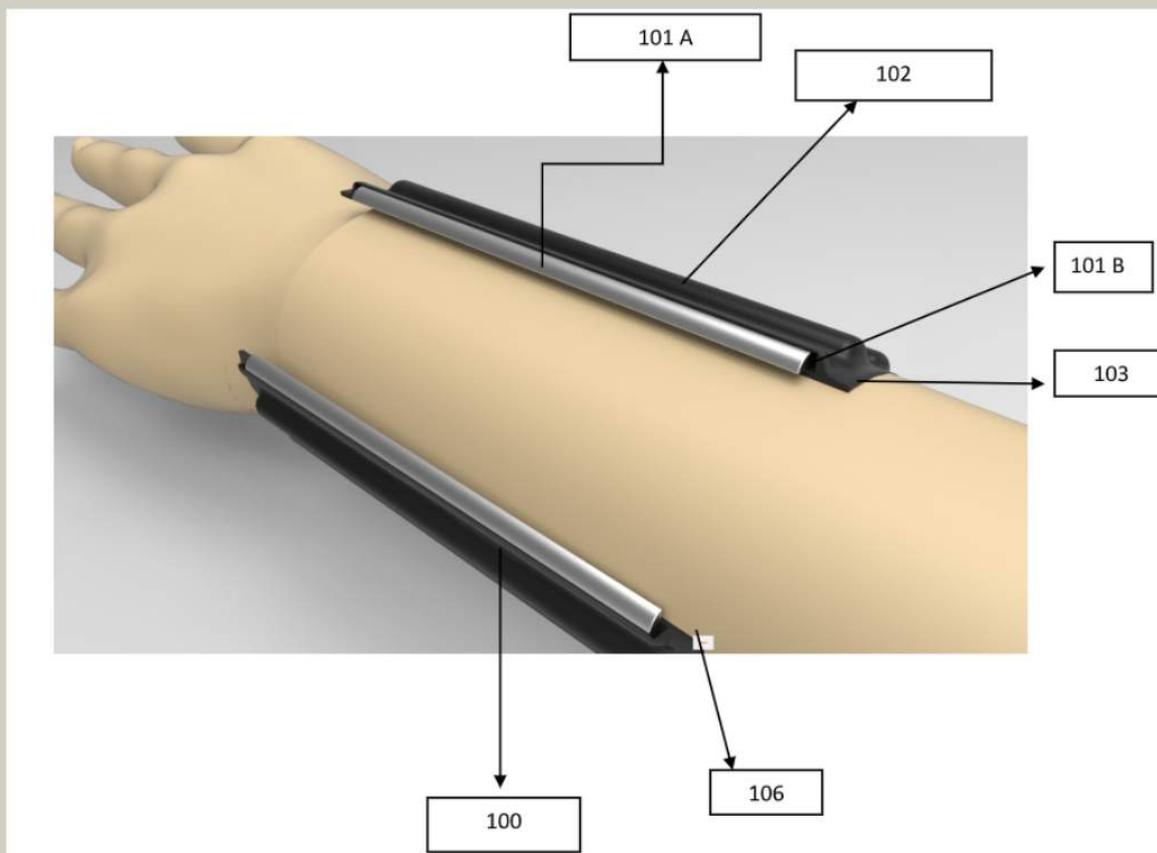
Locating the blood vein is being used for extracting blood, corpse or different object for laboratory examination and chemical checking out chemical examination, inject able drug to be provided, transfusion be provided, insert conduit, ligation operation, loosen up logical operation and sclerosis are carried out the operation etc.; Also if the medical worker unable to find the vein in consecutive attempt it will damage the skin by puncturing it for multiple attempts thus increasing the time taken for the similar

operation, it might leads to critical condition in emergency situation like snake bites or pregnant women in critical care unit.

Thus, present invention will tries to smoothen the most important and critical standard operating procedure of vein injecting with one of kind vein detector mechanism.

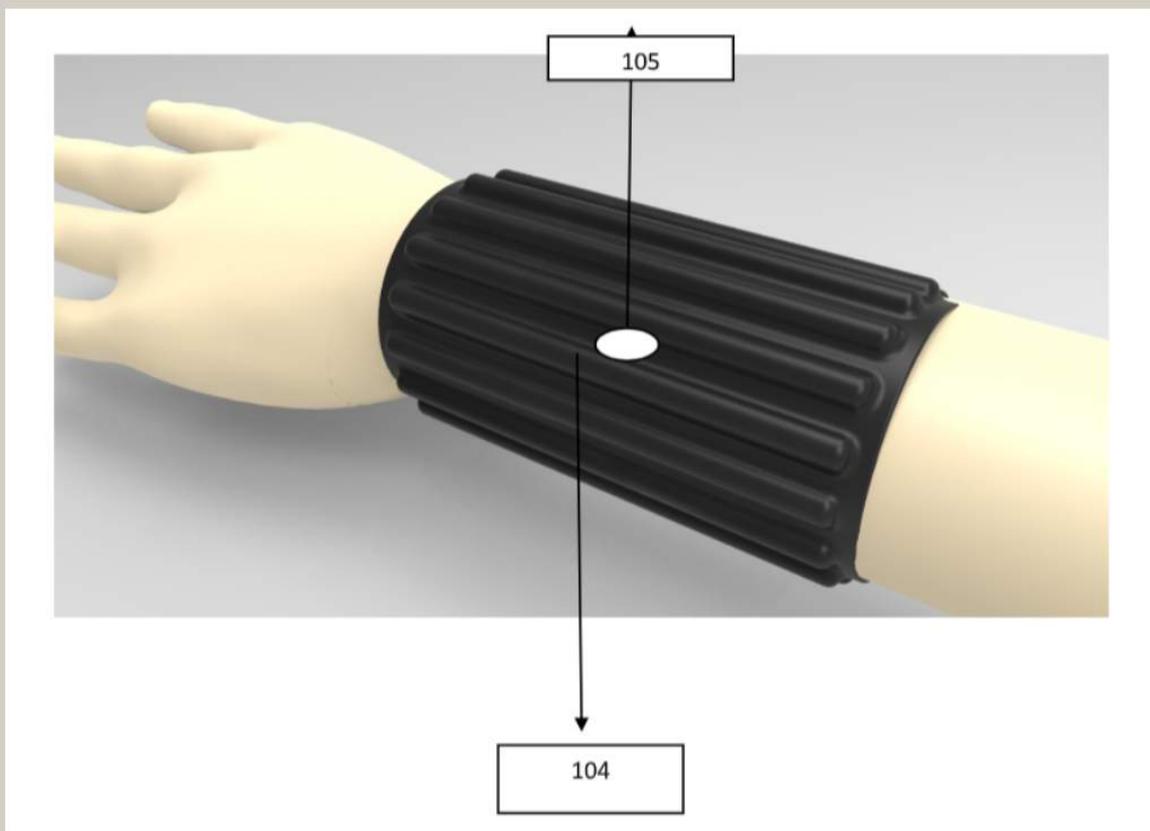
Description:- The present invention will derive the age old problem in medical field to smoothen the vein finding procedure so that the operation will fast track and the reliability and accuracy can be improve in future when dealing with same problem. The Apparatus consist of base structure holding the electric supply of device with battery power unit which is rechargeable, the material used to manufacture the base frame can be flexible and durable material available and any manufacturing procedure can be used to build one of working product.

Patent Diagram 1.Isometric Diagram



- 100- The complete Prototype diagram.
- 101 A- LED Light Metal Protector and Enhancer.
- 101 B – Actual LED Lights with various colours.
- 102- Vibrating Strips assembly.
- 103 – Prototype Frame structure with tighten strips.

2.Rear View of assembly



104-Electric Circuit Assembly.

105-Battery/Power Unit.

106-Electric Charging USB Port.

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STUDENTS CORNER

Global certification courses of students (Cursa)...

1) Business entrepreneurship: 222
2) Intellectual Property : 222



Global certification courses of students (MATLAB)...

1) Onramp : 222
2) Fundamentals : 222
3) Data Processing and Visualization: 222 enrolled

Target	01
Status	1) 01 Student completed Google Startup Boot Camp at RMZ Google office Bangalore 2) Activity Conducted: Shark-Tank at Dexterity 2K22-23 (39 Participants) 3) 03 Students participated at Savitribai Phule Pune University Startup Yatra Competition



Event Photograph at Google Startup Bootcamp & Savitribai Phule Pune University



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