



Shri Shamrao Patil (Yadavkar) Educational & Charitable Trust's

# SHARAD INSTITUTE OF TECHNOLOGY, COLLEGE OF ENGINEERING, YADRAV

"An A Grade Institute Accredited By NAAC, An ISO 9001:2015 Accredited Institute"  
NBA Accredited Programs

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# APEX

...A Newsletter



  
CNC / VMC  
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## Department of Mechanical Engineering 2022-23

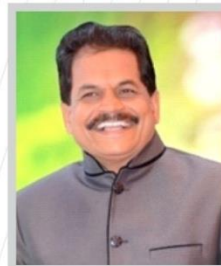
Vol-01, Issue-2

### Themes Inside :

- \* Professional activity programs
- \* Industrial visit record
- \* Guest lecture record
- \* Achievements and awards
- \* VAP Activity
- \* Research publications
- \* Dipex participation



**Hon. Dr. Rajendra Patil (Yadavkar)**  
Chairman  
Shamrao Patil (Yadavkar)  
Education & Charitable Trust



**Hon. Mr. Anil Bagane**  
Executive Director  
Shamrao Patil (Yadavkar)  
Education & Charitable Trust



**Dr. S. A. Khot**  
Principal



**Dr. S D Patil**  
HOD, Mech

## EDITOR MESSAGE



Mr. U. S. Patil  
Assistant Professor

Dear Readers,

It is indeed a great honor to be the “APEX” Newsletter Editor from Department of Mechanical Engineering, SITCOE. And it is an immense pleasure to presenting you with the Volume 1 Issue 2 of AY 2022-23.

A huge thank you to all for the efforts taken by the department faculty, our students who contributed in this “APEX” Newsletter, without which there wouldn’t have been this newsletter issue. Last but not least, I would like to thank Beloved Hon. Executive Director, The Principal, Head of the Department and Faculty members for their everlasting support throughout the creation of this edition.

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## From Student Editor Desk



Aditya Amane  
TY, Mech

Dear readers

We are happy to bring out the Volume 1, Issue 2 of our News Letter “APEX”. Our Faculty diligently involved in encouraging students and preparing for a bright future.

I am glad that I am part of this News Letter preparation and release. I am very much thankful to our Department Faculty members and my team members for helping me in making this “APEX” News Letter of AY 2022-23.

**Student Publishers:** Sameer Momin, Atharva Joshi, Harshavardhan Jadhav, Sanmesh Shinde, Prathamesh Jadhav, Omkar Chougule, Diya Sanadi, Vaishnavi Bandgar, Pallavi Kongnule, Komal Patil, Pallavi Patil

## From Executive Director Desk:



Hon. Shri. Anil A. Bagane  
Executive Director

Dear Readers,

I am happy and glad that Sharad Institute of Technology College of Engineering. Department of Mechanical Engineering is releasing out “APEX” Newsletter Volume 1 Issue-2. Bringing out a department “APEX” Newsletter will definitely help to showcase the activities like Visit details, guest lecture, professional activity event, dipex, etc., that are happening in the department campus. It also helps in building up teamwork which is very much needed today in the world of competition. It provides a platform for exposing the merits and academic achievements of the faculty and students. This enhances the documentation culture of the institute. This newsletter includes highlights of mechanical engineering department with perspective of technical event achievements, faculty achievements, professional society events and activities, etc. I hope that this culture of releasing Newsletter continue forever and become a quoted example for all other colleges to follow.

## From Principal Desk



Dr. S A Khot  
Principal

Dear Readers,

I am extremely delighted to know that faculties and students of Mechanical Engineering Department of Sharad Institute of Technology College of Engineering, bringing out their departmental “APEX” Volume 1 Issue-2 newsletter. This will benefit all the students as they can now be aspired for greater heights by knowing about their Department’s achievements. Students and faculties have exhibited a great zeal and enthusiasm and have contributed significantly in various technical activities. The editorial team has initiated something that will continue to help and guide present and upcoming students of the Department. Personally, I feel that students of Sharad Institute of Technology College of Engineering should set standards and create environment so that they excel in their areas of interests and accordingly guide more and more SITCOEians in future.

## From Head of the Department Desk:



**Dr. S D Patil**  
**HOD, Mech**

Dear Readers,

I feel happy to introduce fourth issue of Apex 2022-23 Issue-2 prepared by faculty and students of Mechanical Engineering Department. Our Mechanical Engineering department has been consistently working towards the goal to produce highly skilled and scientifically oriented manpower through flexible, adaptive and progressive training programs along with cohesive interaction with the research organizations, academicians and industries. “APEX” provides good platform for student to update their technical skills. I congratulate “APEX” team for their efforts in launching second issue of year 2022-23. Wish you all a happy learning here.

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## Professional Activity Society 2022-23 (Sem- II)

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Date and Time	Organized By	Place	Beneficiaries	Activities Conducted
9-12-2022	ISHRAE	SITCOE	TY and B-Tech Mechanical Students(40 Participants)	Quiz Competition on ISHRAE Day
4-2-2023	ISHRAE	Hotel Pavellion, Kolhapur	TY Mechanical Students(6 Students)	URJAVARAN
7-2-2023	ISHRAE	Hotel Atharv , Kolhapur	TY mechanical Students (7 Students)	DL Program
28-2-2023	ISHRAE	Amul Milk Product Jaysingpur	SY Students (30 students)	Industrial Visit
1-4-2023	ISTE	SITCOE	SY, TY & B-Tech Students (262 participants)	Innovation 2K23 (Technical Event)



## QUIZ Competition (ISHRAE DAY)

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### ISHRAE Day

- Event conducted by–ISHRAECLUB, Sharad Institute of Technology, College of Engineering, Yadrav.
- Event Name:–  
QUIZ Competition 2022event conducted on the occasion of ISHRAE Day on 9-12-2022.
- Event Time:–  
Event time is from 2.30 am to 4.00 pm and the event was conducted by offline mode
- Number of Rounds:–

Event contained total 3 rounds. In first round we have created 4 teams, Team condenser, Team evaporator, Team compressor and Teamthermostat.10 members in each group. In first round questions with multiple answers was asked to each team , marks were given on basis of number of answers given to question in first round team thermostat was leading on the table. Then we moved to second round in this round we showed some photos such as LP-HP cut out, humidifier, capillary tube etc and teams have to guess the picture. Participants enjoyed this round; team evaporator became the table toper. In the last and final round was just as rapid fire continuous 10 questions were asked to each team in this round it was tie between team thermostat and team compressor a tie breaker was arranged in tie breaker 5 questions was asked to each teams at last team Compressor was leading with 20 points and won the competition. Everyone enjoyed the competition and learned a lot through it



## Event Poster-

# SHARAD INSTITUTE OF TECHNOLOGY COLLEGE OF ENGINEERING, YADRAV-ICHALKARANJI (An Autonomous Institute)



On the occasion of **ISHRAE Day** department of Mechanical Engineering conducting **Quiz Competition Event** and Talk on **HVAC Growth in India** at SITCOE, Yadrav.



Certificates is provided to all participants



Mr. A.S.N.Husainy and Mr. S.V.Kumbhar  
Faculty Co-ordinators

Friday, 9<sup>th</sup> Dec 2022  
Time: 2:30 PM Onwards

Dr. S.D.Patil  
HOD, Mech

Dr. S.A.Khot  
Principal

Hon. Shri. Anil A. Bagane  
Executive Director

Event photo:





## Selected project for Dipex competition

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Project Title: Performance improvement and energy saving of refrigeration system by waste heat recovery and thermal storage system

Students Involved- Mr. Atharv Rahul Joshi, Mr. Harshvardhan Deepak kamat, Mr. Vaibhav Vikram Chougule, Mr. Harshvardhan Ankush Jadhav, Mr. Rohan Mahesh Thomake

Name of the guide- Mr. A. S. N. Husainy



Project Title- Enhancing Paralympic sports person performance with hybrid cooling to reduce pressure ulcer.

Students Involved: Mr. Shubham Suresh Powar, Mr. Aditya Hemant Amare, Mr. Suraj Jaysing Lal, Ms. Diya Zakirhusen Sanadi, Ms. Rajashree Subhash Shinde

Name of the guide- Mr. A. S. N. Husainy



Project title- Development of smart solar bio panel and its growth monitoring using machine learning algorithms.

Students Involved: Mr. Omkar Suresh Chougule, Mr. Samir Nurmuhammad Momin, Mr. Sanmesh Sunil Shinde, Mr. Prathmesh Uttam Jadhav

Name of the guide- Mr. A. S. N. Husainy



Project title- Smart IoT & ML Based Vaccine storage system with thermal energy storage system

Students Involved: Mr. Bhushan Satish Kumbhar, Mr. Shravani Vijay Chougule, Mr. Mayuri Rajendra Power, Mr. Dipam Sachin Kakde, Mr. Piyush Vijay Kore, Mr. Prajwal Santosh Chavhan

Name of the guide- Mr. A. S. N. Husainy



## Guest Lecture Summary

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Sr. No.	Topic for Expert Talk	Expert Name & Designation	Date of Expert Talk	Class	No. of Beneficiaries
1	Entrepreneurship Development	Saurabh Bhosale, stark tech ventures pvt lmt.	17/1/2023	TY	68
2	Application of microcontroller	Mr. Ajay Varkhal, FIE research Institute	23/1/2023	TY	84
3	Competitive exams	Mr. Sheetal Kumbhar, Union bank of India, Pune	25/02/2023	SY, TY	115
4	GD&T	Mr. Rahul Patil, management representative, Rohit engineering pvt Ltd, Gokul shirgaon	13/3/2023	SY	40
5	Solar standalone system design	Mr. Chetan More, owner Solar Solution	25/3/23	SY	46
6	GRE Exam Need and scope	Mr. Pallavi Desai. Business consultant	29/3/2023	SY, TY	128
6	Opportunities in E-Vehicles	Mr. Prashan Rokade, Technical Head and learning consultant Autobot India	19/4/2023	SY, TY	110





## Research Publication in year 2022-23

Sr. No	Name of Faculty member	Title of Research Paper	Name of Journal/Conference	Volume/Issue, Year of Publication	ISSN
1	Mr. P H Yadav	Investigation on vibration parameters in aluminum finned tube arrays subjected to water cross flow	Multidisciplinary modeling in materials and structures	Vol 18, Issue 5	1573-6105 SCIE
2	Mr. A S N Husainy	Experimental investigation of eutectic phase changing materials (KCL + Na <sub>2</sub> SO <sub>4</sub> ) mixed with graphene (Gr) nano-particles on refrigeration test rig	Material Today proceeding	10 Nov 2022	<a href="https://doi.org/10.1016/j.matpr.2022.09.379">10.1016/j.matpr.2022.09.379</a> SCOPUS
3	Mr. Suyog Patil	Development of optimized maintenance program for a steam boiler system using centered maintenance approach	Sustainability	15 Aug 2022	SCIE DOI- 10.3390/SU141610073
4	Dr. S D Patil	Analyzing the design parameters and their influence on the tensile strength of composite layers using tagochi techniques	Material Today proceeding	15 Nov 2022	Scopus DOI- 10.1016/J.MATPR.2022.11.276
5	Mr. B BSangame	Analyzing the effect of inoculant addition on the solidification of ductile cast irons using thermal analysis	World Journal of Engineering Emerald Publishing Limited	Article publication date: 21 December 2022	ISSN 1708-5284 <a href="https://www.scopus.com/sourceid/21100305241">https://www.scopus.com/sourceid/21100305241</a>
6	Mr. S V Kumbhar	Experimental investigation of ethanol gasoline blends on the performance combustion and emission characteristics of SI engine	Science Direct (Material Today Proceeding) Elsevier Publisher	5 Dec 2022	1369-7021 Scopus
7	Mr. A A Desai	Analyzing the design parameters and their influence on the tensile strength of composite layers using tagochi techniques	Material Today proceeding	15 Nov 2022	Scopus DOI- 10.1016/J.MATPR.2022.11.276
8	Mr. A A Desai	Design analysis and development of additive manufacturing by FDM technique with dual nozzle assembly	Material Today proceeding	15 Nov 2022	SCOPUS DOI 10.1016/J.MATPR.2022.11.010



## Innovation 2K23 EVENT

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Total no of participation form mechanical engineering is more than 300 students from various states of India. This event is organized by Sharad institute of technology, in association with ISTE chapter.

### Paper Presentation



### Project competition



**Lathe War**



**Draft Mania**





## Prize Distribution Ceremony





## Industrial Visit Summary 2022-23

Sr No	Name of the Industry	Subject	Visit In Charge	Class	Date of Visit
1	Bakare Industries	Industrial Automation & Robotics	Mr P H Yadav	SY	27.01.2023
2	Arni Mech Pvt Ltd	Industrial Automation & Robotics	Mr P H Yadav	SY	27.01.2023
3	Mechasoft Pvt Ltd	Advanced manufacturing Process	Dr P M Bhagwat	TY	01.02.2023
4	Thermax TBW	Advanced manufacturing Process	Dr P M Bhagwat	TY	03.02.2023
5	Wilo Matther & Platt Pumps Pvt Ltd	Advanced manufacturing Process	Dr P M Bhagwat	TY	03.02.2023
6	Hind Gears	Machine Design II	Dr S S Patil	TY	03.02.2023
7	Pragati Automation	Industrial Product Design	Mr S M Ghanvat	SY	14.02.2023
8	ST Workshop	ICE & HV Lab	Mr S G Bardiya	TY	23&24.02.2023
9	Flame Industries	Engineering Materials	Mr S B Herwade	SY	28.02.2023
10	Amul Diary	Fluid Mechanics	Mr A S N Husainy	SY	28.02.2023
11	Saideep Traders	ICE & HV Lab	Mr S G Bardiya	TY	10.04.2023



## Industrial Visit Summary 2022-23

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VAP Program name- Python Programming

Trainer Name- Mr. Sachin Patil (CADD center, Kolhapur)

Date- 24<sup>th</sup> April to 30<sup>th</sup> April 2023

Students Involved- 40 (SY and TY Mech)

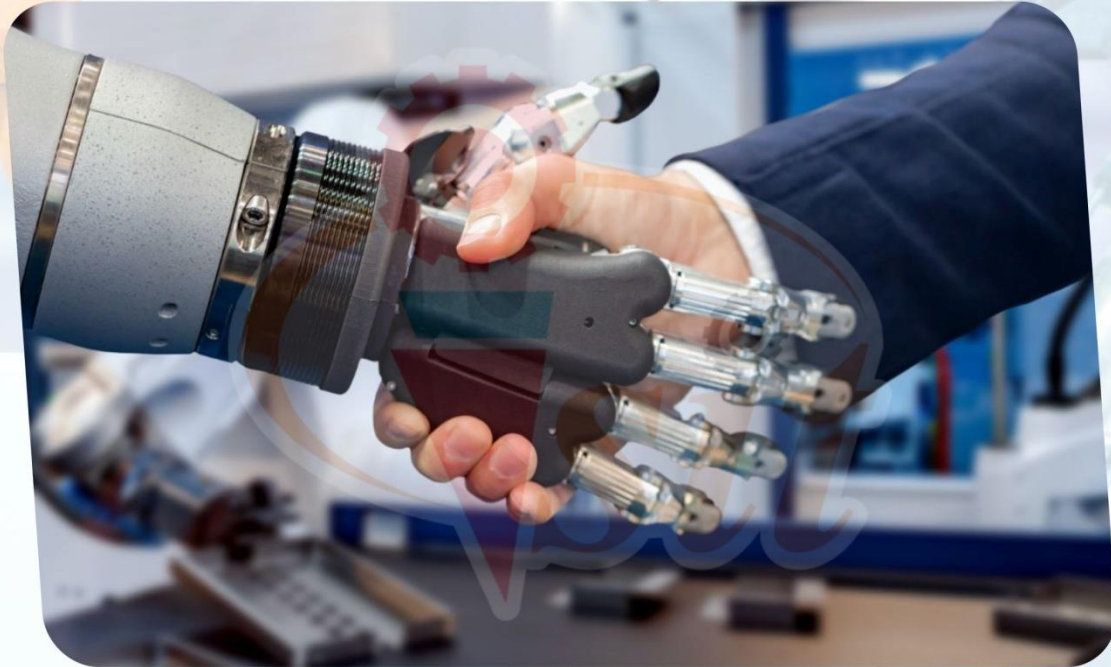




## MESA Committee (2022-23)

<b>Sr.No.</b>	<b>Post</b>	<b>Name of Student</b>
1	<b>President</b>	SanketKinekar
2	<b>Vice President</b>	AdityaAmane
3	<b>Vice President</b>	Atharv Joshi
4	<b>Senior Treasurer</b>	PranitKhurape
5	<b>Treasurer</b>	HarshvardhanJadhav
6	<b>Senior Secretary</b>	SurajLal
7	<b>Secretary</b>	VaibhavChougule
8	<b>Core Working Committee Member</b>	1.Somesh Patil 2.Jeevan Gurav 3.Abhishek Funde 4.Shubham Pawar 5. RushikeshNaik 6.Pratik Gurav 7. HarshvardhanKamat
9	<b>Coordinators</b>	1. Apurvpatil 2. Prasad Mane 3. OmkarChougule 4. Pratik patil 5. PrathmeshKolake 6. ArunKagwade 7. RajshreeShinde 8. AniketNandurge 9. DadasoNirwane 10.AvishkarGatare 11.RushikeshKorabu 12.RavichandraRajmane 13.Rahul Karmarkar 14.AniketPhulari





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## **SHARAD INSTITUTE OF TECHNOLOGY, COLLEGE OF ENGINEERING**

Yadrav (Ichalkaranji), Dist.-Kolhapur (Maharashtra)

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