



Shree. Shamrao Patil (Yadravkar) Educational & Charitable Trust's
**SHARAD INSTITUTE OF TECHNOLOGY
COLLEGE OF ENGINEERING**
"A Grade Accredited by NAAC"

DEPARTMENT OF MECHANICAL ENGINEERING 2018-19

APEX

A NEWSLETTER

Vol: 01 Issue: 01



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Education & Charitable Trust



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Principal



Dr. V.S. Hajare
HOD, Mechanical

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From HOD's Desk



Dr. V.S. Hajare
HOD, Mechanical

Dear Readers,
It is a very pleasant moment to know that Mechanical Engineering Department of Sharad Institute of Technology is publishing their 7th edition of technical Newsletter 'APEX' in the academic year 2018- 2019 semester first. The Department of Mechanical Engineering publishes newsletter "APEX", it providing semester wise information of the students and staff activities taking place in inside and outside the campus. The newsletter comprises of all highlights of all events being organized in a semester including, sports activities, cultural activities, academic activities, professional society activities, etc. This Newsletter will reflect the intellectual as well as creative ideas of the students. I am very happy about successfully completion of 7th edition of 'APEX'. Wish you all the best for APEX team.

From Faculty Editor's Desk,



Prof. H.S. Nejkar
Mechanical Engineering Department

Dear Readers,
It is a great privilege to present the 7th edition of technical Newsletter 'APEX'. We the team of APEX would like to show our gratitude and heartfelt thanks to all student and faculty from mechanical department, those who have contributed to make this effort in a successful one. I am sure that this technical newsletter motivates more students from Mechanical Engineering Department to participate extracurricular and co-curricular activities. I wish you all the best to NOESIS team and hope they will bring more innovative ideas to the surface. We profusely thank our Hon. Executive Director Mr. Anil Bagane, Principal Dr. S. A. Khot And Head Of Mechanical Engineering Department Dr. V.S. Hajare for giving support and encouragement for successfully completion of this edition.

From Student Editor's Desk,



Mr. Shubham Kulkarni
T.E. Mechanical

Dear Readers,
I am very happy to become a student editor of Apex technical newsletter. I am abundantly thankful to our Head of Mechanical Engineering Department Dr. V. S. Hajare sir and Prof. H.S.Nejkar sir for giving me such outstanding opportunity.

Student Committee Members

Mr. Rahul Shinde
Publisher

Mr. Amey Panade
News Head

Mechanical Engineering Department

VISION

To be a centre of excellence in Mechanical Engineering education to prepare professionally competent engineers with lifelong learning attitude for the accomplishment of ever-growing needs of society.

MISSION

- To prepare technically and professionally competent engineers by imparting quality education through effective teaching learning methodologies and providing stimulating environment for research and innovation.
- To develop professional skills and right attitude in students that will help them to succeed and progress in their personal and professional career.
- To imbibe moral and ethical values in students with concern to society and environment.

Program Educational Objectives (PEOs)

Graduates of the programme will

- PEO I: Demonstrate capabilities to develop optimal solution to the real world engineering problems by applying theory based practical approach of engineering and related engineering disciplines.(K)
- PEO II: Exhibit professional skills, ethical attitude and sensitivity towards society and environment.
- PEO III: Engage in life-long learning for successful adaptation to technological changes.

Mechanical Engineers Student Association (MESA)

Activity Report

About MESA

MESA, the mechanical engineering student's association of Sharad Institute of Technology, College of Engineering, Yadrav, aims to play a pivotal role in the development of students as engineers by various out-of-curriculum and extracurricular activities. MESA aims to inculcate among its members an awareness and appreciation of the various disciplines of not just Mechanical Engineering but also other relevant fields. MESA seeks to be an active organization of the mech department at Sharad Institute of Technology, College of Engineering, Yadrav, which promotes their career interests.

MESA Events List

Conducted		Planned	
DATE	EVENT	DATE	EVENT
25th Aug. 2018	MESA Reinstallation program and Event of Technical Quiz Competition & Poster Presentation	20th Dec. 2018	Vehicle Check-up Camp
5th Sept. 2018	Teachers day Celebration and Event of Paper Presentation at Department Level	9th Jan. 2019	Department Level Technical Event
15th Sept. 2018	Technical Events:- ISO Maker, AutoCAD Mania, Game Fever	27th Jan. 2019	Blood Donation Camp
19th Sept. 2018	Guest Lecture on "GATE Exam Awareness"	Last week of February	Innovation 2K19 at college level
22th Sept. 2018	Impetus 2K18 at College Level	Also planned for	
		<ul style="list-style-type: none"> • Industrial visits • Guest Lectures • Technical Sessions 	

MESA Reinstallation Program

The MESA reinstallation program was arranged on 25th August 2018 to appreciate the students who were selected for MESA Core Committee members and commencement of MESA activities for the academic year 2018-2019. The main guest for this event was Mr. Suresh Patil, Strategy Sourcing Manager, Kirloskar Oil Engines Ltd. Kagal.

Events Organized

On the same day technical events were also arranged to enhance the student technical and professional skills. The event of Poster Presentation and Aptitude Test was arranged on the same day and total 75 students were participated for these events.

In the event of Poster Presentation, Prathmesh Patil (TE-C) has got first prize and in the Aptitude Test, Shubham Gosavi and Harshad Deshmukh (SE-A) got the first prize.

Photographs of Reinstallation & Event



Lightening of Goddess Saraswati



Appreciation of committee members



Guest Speech



Audience



Poster Presentation



Quiz Competition

Teachers' Day Celebration and Paper Presentation Event

The MESA committee organized the event of Paper Presentation at department Level on the Occasion of 'Teachers Day'. The topic for Paper Presentation is any technical topic related with the Engineering. Also, on the occasion of Teachers Day, the MESA committee felicitates all the Teachers, Lab Assistant and Peons of the Mechanical Department.

Total 30 students were participated from the class SE, TE & BE. In the event of Paper Presentation, Shubham Gosavi and Harshad Deshmukh, Amrut Jadhav from SE class and Anuj Birnale and Omkar Jadhav from TE class got prizes.

Photographs of event and Teachers' Day celebration



Teachers' Day Decoration



Paper Presentation



Teachers' Felicitation



Event Prize Distribution



Technical Events:- ISO Maker, AutoCAD Mania, Game Fever

About the Events

The MESA committee organized the event of AutoCAD Mania, ISO Maker and Game Fever at College Level on the Occasion of 'Engineers Day'. The AutoCAD Mania competition is based on AutoCAD software. Two rounds are taken for the same based on 2-D and 3-D drawings and take out two winners based on various skills. Total 12 students were participated from the class SE, TE & BE. In the event of AutoCAD Mania, Shubhangi Tukshetti and Shubham Lad got the prizes.

ISO Maker event based on Engineering graphics organized and total 34 students were participated for the same. Amrut Jadhav got the first prize in ISO Maker event.

Also, on the occasion of Engineers Day, the MESA committee organized LOGO & Slogan Competition. Total 18 students are participated and Ms. Kajal Mulla from TE class got prize for LOGO Competition and Mr. Dhiraj Patil got the Prize for Slogan competition.

Event Coordinators

ISO Maker

1. Shoheb Shaikh
2. Jagdish Choudhary
3. Abhishek Jagtap

AUTOCAD Mania

1. Ankush Gurav
2. Omkar Karangale
3. Shubham Thate

Logo & Slogan Competition

1. Ankush Gurav
2. Omkar Karangale
3. Shubham Thate

Photographs of ISO Maker, AutoCAD Mania, Game Fever



ISO Maker



AutoCAD Mania



Logo & Slogan Competition



Prize Distribution



Guest Lecture on "GATE Exam Awareness

About Guest Lecture

The MESA committee organized the Guest Lecture for the students of SE, TE and BE students to create awareness about GATE Exam and advantages of giving GATE exam. Dr. S. R. Desai was the guest who is HOD of Automobile Department in RIT, Islampur.

He had given the detailed information related to GATE Exam and also told the opportunities to students after giving the exam. Also given the information about opportunities in Public Sector depend on GATE Score.

Resource Person

Dr. S. R. Desai,
(HOD, Automobile Dept, RIT, Islampur)

Date of Guest Lecture

19th Sept. 2018, Time:- 2.20 pm- 4.20pm

Photographs of Guest Lecture on GATE Exam Awareness



Guest Felicitation and Welcome



Dignitaries



Audience

IMPETUS 2K18

About the Event

On behalf of Engineers Day, Sharad Institute of Technology, College of Engineering, Yadrav conducting A Technical Event Impetus 2K18. This event organized at college level and all the departments participated in this event. The inauguration function carried out in presence of Principal Dr. S.A. Khot sir and Vice-Principal Mrs. S. P. Kurlekar.

Mechanical Department organized two events namely Technical Paper Presentation and Mock Campus. Total 69 students were participated for both events and Ms.Mehrunisa Shaikh got first prize in Technical Paper Presentation whereas Mr. Uday Patil & Mr. Ranjit Desai for Mock Campus.

Event Details

TECHNICAL PAPER PRESENTATION

TOPICS:

1. Bio degradable Polymers
2. Ablative Materials
3. Cryogenic grinding
4. Active rollover protection system in automobile
5. Aero spikes
6. Space Elevators
7. Under water windmills
8. Thermoacoustic Refrigerator

Rules:

- Maximum Two Participants.
- Bring spiral hard copy of report at the time of presentation.

Student Co-ordinators:

1. Abhishek Jagtap
2. Jagdish Choudhary

Mock Campus (A contest on campus interview rounds)

Round:

1. Aptitude Test
2. Rapid Fire
3. Ex-Tempore

Rule:

Maximum 2 Participants

Student Co-ordinators

1. Shoheb Shaikh
2. Tanvir Mulla
3. Chetan More
4. Kajal Mulla

NAME OF WINNERS

PAPER PRESENTATION:

WINNER: Mehrunisa Shaikh
RUNNER UP: Amrut Jadhav & Amey Panade

MOCK CAMPUS:

WINNER: Uday Patil & Ranjit Desai
RUNNER UP: Sourabh Sutar & Shreyas Patil

Photographs of Events



Lightening of Goddess Saraswati



Inauguration of Mock Test



Mock Test



Prize Distribution

The Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE)

(Kolhapur-Sangli Sub Chapter)



World Ozone Day Report (i-zone 2018)

About ISHRAE

The Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE), was founded in 1981 at New Delhi by a group of eminent HVAC&R professionals. ISHRAE today has more than 12,000 HVAC&R professionals as members and additionally there are 7,500 Student-members. ISHRAE operates from 41 Chapters and sub Chapters spread all over India, with HQ in Delhi. It is led by a team of elected officers, who are members of the Society, working on a voluntary basis, and collectively called the Board of Governors.

Activities of ISHRAE Student Chapter

1. Student Membership of one of the vibrant professional bodies
2. ISHRAE Journal
3. Membership Certificate which is a credential while applying for admission to foreign universities
4. Participation in National level Quiz and Design Competitions
5. Interaction with professional
6. Discounts on ISHRAE Books
7. Fee Concession in Local ISHRAE Chapter programs
8. Internship
9. Grants for Project work

ISHRAE student chapters in more than 150 engineering colleges encourage students to opt for careers in the HVAC&R industry. Knowledge dissemination is done through seminars, quiz contests, plant and site visits. K-12 initiative of ISHRAE is focused on school students' contests, in making them aware of subjects like, energy conservation and environmental concerns through drawing competitions, poster design, and quiz and planting of trees. Emphasis on STEM is stressed to inculcate a scientific fervour & help develop these young children into responsible citizens.

About Event

On Behalf of World Ozone Day we conduct Event iZone-2018 on 18/9/2018 at Sharad Institute of Technology College of engineering, Yadrav. More than 300+ students participated in this.

The Prize distribution of ISHRAE in our SIT COE, Yadrav was held on 18 September 2018, on this auspicious occasion we had Principal Dr.S.A.Khot sir, Head of Dept Prof. Dr.V.S.Hajare sir, ISHRAE co-ordinator Prof. A.S.N. Husainy sir, all mechanical faculty and ISHRAE students. There was a motivational lecture delivered by Dr. S.A.Khot sir and Dr. V.S.Hajare Sir.

Vision of izone-2018

- To make students aware of subjects like, energy conservation and environmental concern.
- To increase their area of interest towards to save the environment.

Events

1. I-Quest.
2. Post Expo.
3. Ozotone.

Student Event Co-ordinators

- Rupesh Ingale
- Sanjana Patil
- Aniket Shinde



Speech Competition



Poster Presentation



Questioning and Answering



Photo of Poster



Quiz Competition



Speech delivered by Principal Sir



Prize Distribution Ceremony



Team ISHRAE, SITCOE, Yadrav



Audience



ISHRAE : Visit Report



Visit 1: Shrivardhan Biotech, Kondigre

ISHRAE Students from SIT COE; YADRAV visited Shrivardhan Biotech, Kondigre.

Date – 28TH SEPT 2018
 Time – 3pm to 5pm
 Total No of students– 35

Activity Completed–

Objective of Visit is to study HVAC System of Shrivardhan Biotech Cold storage.



Glimpse of visit to Shrivardhan Biotech, Kondigre



Visit 2: Amul Milk Processing Unit, Jaysingpur

ISHRAE Students from SITCOE, YADRAV visited Amul Milk Processing Unit, Jaysingpur

Date– 28TH SEPT 2018
 Time– 11am to 1pm
 Total No of students– 35

Activity Completed–

Objective of Visit is to study the Milk Processing unit as well as to study the components like Boiler, Heat Exchanger, Shell type Condenser, Evaporator, Etc.



Glimpse of visit to Amul Milk Processing Unit, Jaysingpur



ISHRAE : K-12 Activity Report



K-12 Activity Report 1: L.G.R. Purohit Kanya Prashala, Sangli

Kolhapur Sangli Sub chapter completed K12 activity in L.G.R. Purohit Kanya Prashala, Sangli

Date- 1ST OCT 2018
Time- 10am to 11am
Total No of students- 90 (8th Std Student)

Activity Completed-

Kolhapur Sangli Sub chapter completed K12 activity in L. G. R. Purohit Kanya Prashala, Sangli
Activities Conducted were as follows,

- 1) To improve the basic knowledge of Renewable and non-renewable sources and its application.
- 2) Deliver a presentation on Renewable and non-renewable sources and deliver a presentation on basics of refrigeration and air conditioning.
- 3) Little Guidance to them Regarding Future Studies after 10th and 12th.



Glimpse of K12 activity in Patwardhan High School,Sangli

K-12 Activity Report 3: M. K. Athavale Vinay Mandir, Sangli

Kolhapur Sangli Sub chapter completed K12 activity in M. K. Athavale Vinay Mandir, Sangli

Date- 1ST OCT 2018
Time- 3pm to 4:30pm
Total No of students- 85 (4th Std Student)

Activity Completed-

Kolhapur Sangli Sub chapter completed K12 activity in M K Athavale Vinay Mandir, Sangli
Activities Conducted were as follows,

- 1) Overview of environment changes, Global Warming, Greenhouse effect to children
- 2) General issues Related to cleanliness and Social Ethics.
- 3) General discussion about ozone depletion



Glimpse of K12 activity in M. K. Athavale Vinay Mandir, Sangli

K-12 Activity Report 2: Patwardhan High School,Sangli

Kolhapur Sangli Sub chapter completed K12 activity in Patwardhan High School,Sangli.

Date- 1ST OCT 2018
Time- 1pm to 2pm
Total No of students- 70 (9th Std Student)

Activity Completed-

Kolhapur Sangli Sub chapter completed K12 activity in Patwardhan High School, Sangli.
Activities Conducted were as follows,

- 1) Basic Introduction about ISHRAE and Other things in Engineering.
- 2) To create awareness among the student about urbanization, climate change, acid rainfall
- 3) Bad effects of change in carbon cycle, green house, effect on biochemical path way, urban heat island effects were discussed.

Activity Report 2018-19(Sem-I)



A brief report of a Three Day workshop on "FUSION 360 software" Organized by Department Mechanical Engineering on 29th & 31st August, 2018.

Three day Student workshop was conducted on 29/08/2018 and 31/08/2018 in Design & Innovation Center Powered by Autodesk. There were a total of 40 students who were participated from our college & gained benefit from this training program, the session has given hands-on training on Fusion -360.

Outcome:

- The students attending the three-day workshops were able to more thoroughly the tutorial exercises on Fusion-360 software.

Glimpses of workshop



A brief report of a Three Day workshop on "FUSION 360 software" organized by Department Mechanical Engineering on 24th & 26th September, 2018.

Three day Student Training program was conducted by 'Design & innovation Center powered by Autodesk' on 24/09/2018 and 26/09/2018. There were a total of next 40 students who were participated from our college & gained benefit from this training program, the session has given hands-on training on Fusion -360.

Outcome:

- The students attending the three-day workshops were able to more thoroughly the tutorial exercises on Fusion-360 software.
- The outcome of the workshop was in the form of implementation of a sample of Rendered image

Glimpses of workshop



Autodesk Boot Camp for Faculty and Student (Three Days at Pune)



Date 28th may 2018 to 30th may 2018

Two Faculties & Three students were appointed for Autodesk Boot Camp, Bangalore. The Training Includes learning different modules like Modeling, Patching, Sculpting, Rendering, CAM & CAE & shape optimization etc.

The Boot Camp has been entail four elements: (1) Pre-Workshop Signup/Team Formation, (2) A Case Study, (3) Interactive Design Session, and (4) Question and Answer segment. The Boot Camp emphasized that more focused be given to industry based projects, product development etc.

The participants were,

Faculty: Mr. A.A. Desai, Mr. S.M. Ghanavat

Student: Mr.Onkar Karangale, Mr.Shivam Dhanawade, Mr.Ankush Gurav

Glimpses of Autodesk Boot Camp



College level:-Design-Now Competition – 2018

Date 21st July, 2018 to 05th August, 2018

Design Theme: - Product Design

In this competitions 363 students had submitted their respective project. These competitions were held in SITCOE, YADRAV Ichalkaranji. Participants involved in a Fusion-360 to learn 3D designing & to connect the entire product design competition.

Glimpses of Competition



College level:-Design-Now Competition

Date 11th August, 2018 to 9th September, 2018



Design Theme: - Product Design

In this competitions 80 students had submitted their respective project. These competitions were held in SITCOE, YADRAV Ichalkaranji. Participants involved in a Fusion-360 to learn 3D designing & to connect the entire product design competition.

Glimpses of Competition



College level:-Design-Now Competition – 2018

Date 03rd September, 2018 to 30th September, 2018

Design Theme: - Product Design

In this competitions 49 students had submitted their respective project. These competitions were held in SITCOE, YADRAV Ichalkaranji. Participants involved in a Fusion-360 to learn 3D designing & to connect the entire product design competition.

Glimpses of Competition



Autodesk Talent of Tomorrow Student Program at Delhi



Design Theme: - Product Design

Autodesk crew conducted two days workshop in the JW Marriott hotel , Delhi on 10th and 11th September, 2018 where our students were Selected for this program. This Program was a training program in which the students were been trained to about GD&T as well as upgrading the Software of Fusion 360 and at the end of the workshop students were able to conceptualize their own ideas with the help of the Fusion 360 software. The Student were presented their own project.

Selected Student 1)Mr. Omkar Karangale 2) Mr. Shivam Dhanawade

Objective of Program

- A platform to share technical knowledge & solve unique business challenges
- Get hands-on experience of cutting edge technology
- Forum to learn best practices and connect with industry experts



Guest Lecture Summery 2018-19 (SEM-I)

Sr. No.	Title of Expert Lecture	Class	Date of conduct	Name of Expert Resource person	Company /Institute
1	Smart Material	BE	31/07/18	Dr. H. B. Nirajan	SAIT Bangalore
2	Innovative Casting Technique	BE	31/07/18	Prof. Basavrajappa	SAIT Bangalore
3	Additive Manufacturing	BE	28/08/18	Mr. Tejas Patnawar	I-3D minds, Ichalkaranji
4	Developing Enterpreuer mindset	SE, TE, BE	30/08/18	Mr. Vinay K. Magdum	Siddha Engineering, Hatkanangle
5	Alumni Talk (Job Opening in Software Industry)	TE	02/09/18	Mr. Avdhoot Patil	Q spider Pune
6	Alumni Talk	TE	10/09/18	Mr. Mahesh Gurav	CAD CAM Solutions Pvt. Ltd.
7	Synopsis preparation and project writing	BE	11/09/18	Prof. R.V. Pethkar	ADCET Ashta
8	Fluid Dynamics	SE	11/09/18	Prof. R.V. Pethkar	ADCET Ashta
9	How to become enterpruner	BE	19/09/18	Mr. Atul Lad	Orca Pvt. Ltd. Sangli
10	Awareness in GATE Exam	BE	19/09/18	Dr. S. R. Desai	RIT Sakhrale
11	GATE Exam Preparation	BE	19/09/18	Dr. S. D. Patil	RIT Sakhrale
12	Principles of Mahatma Gandhi	SE, TE, BE	10/01/18	Dr. Prasad Kulkarni	Samajwadi Prabhodhani, Ichalkaranji

Value Added Program (VAP)

Program Details

Department: Mechanical Engineering Department
Activity Title: VAP Activity CATIA V5
Date and Time: 1st Sept. to 7th Sept. 2018
Resource Person: Mr. Bhushan Chougule
Class: SE & TE MECHANICAL
Purpose: Value Added Program

Under PBL our department conducts so many activities like UG Fellowship, Thursday and Saturday activity slot, VAP, etc. Under VAP activity we are conducting so many Value added software certification program like CATIA, CREO, ANSYS WB, CFD, etc. In the current Academic year 2018-19 we provide CATIA V5 Program to SE AND TE Mechanical Student. Manage Code Cultivate is the most famous and reputed Training Institute in Western Maharashtra. And Mr. Bhushan Chougule is the trainer for CATIA V5 Software.

42 Student from BE Mechanical was take a part in this VAP Activity which is held at SIT COE, in AUTODESK LAB. They teach maximum tools of ANSYS WB as well as they give Mini and Mega Project to Student. And after completion of their projects they provide certificate to them. Total 50 hr (One week) training is provided by M.C.C. on CATIA V5.

Glimpses



VAP Workshop



ISHRAE: K-12 Activity



ISHRAE: Field Visit



Glimpse of VAP Activity CATIA V5



Prize distribution of iZone 2018 Event