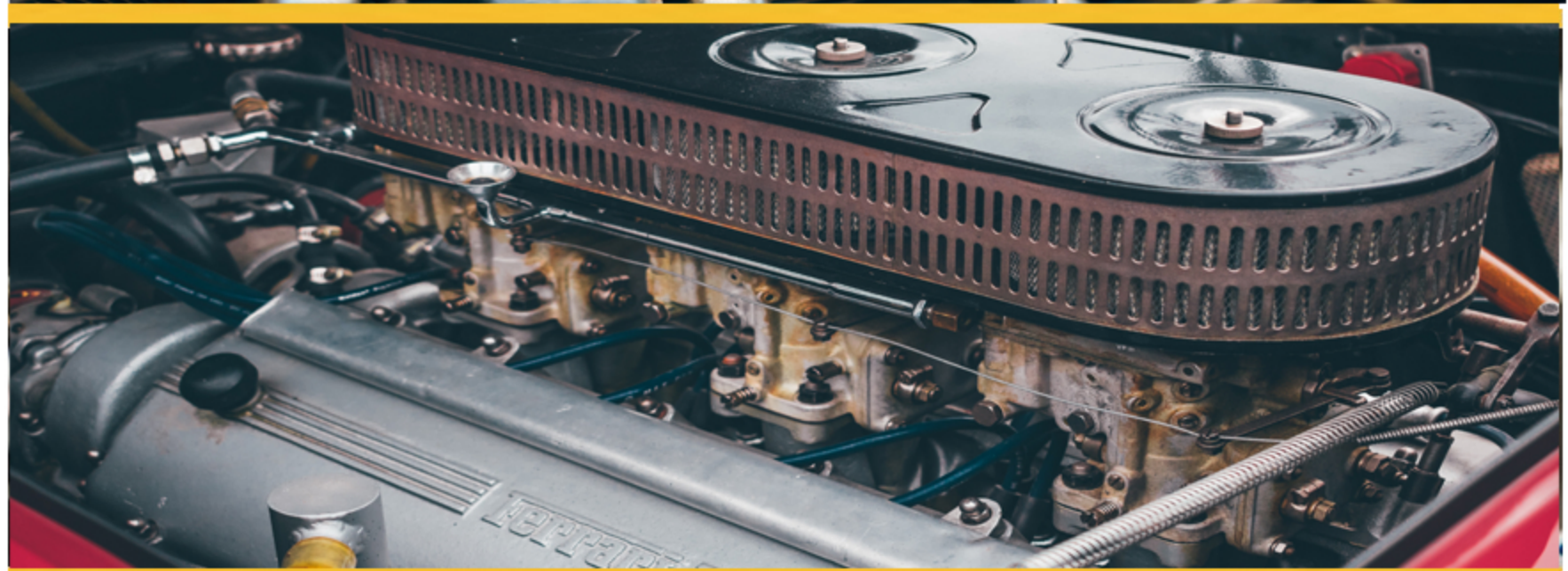


M.I.T B'TECH

MECH-ZINE 2020-21



MAHARASHTRA INSTITUTE OF TECHNOLOGY

15<sup>TH</sup> EDITION

***Mechanical Engineering Magazine***

## ***Forward From Editorial Team:***

The teams intend to provide all the readers with the dimension of ambition that our student and teacher conveyed with the fantastic movement in and out of the academics. The major interest captured the aspiring wings fly high in the online events organized and attended by the students provided a novel impression

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# ***Content***

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- 2. Webinars**
- 3. Placement**
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**(ICRTME-2021)**

## **International Conference on “Recent Trends in Mechanical Engineering”**



**Prof. (Dr.) Pramod Yeole**  
(Vice-Chancellor, BAMU)

Department of Mechanical Engineering, Maharashtra Institute of Technology (MIT) Aurangabad has organized the first Online International Conference on “Recent Trends in Mechanical Engineering” (ICRTME-2021). The two-day online event began on Friday 22nd January at 10:00 am and will conclude on Saturday 23rd January at 5:00 pm. The Inauguration Ceremony of the Conference was hosted by dignitaries including Prof. (Dr.) Pramod Yeole, Hon’ Vice-Chancellor of Dr. Babasaheb Ambedkar Marathwada University (BAMU), Aurangabad; Dr. Santosh Bhosle, Principal,

Maharashtra Institute of Technology, Aurangabad; Dr. Ashok Keche, Head of Mechanical Engineering Department, MIT; Dr. Mustafizur Rahman, Managing Director, Mikrotools Pte. Ltd. Singapore; Dr. Srinivasa Rao Pedapati, Associate Professor, Department of Mechanical Engineering, UTP Malaysia; Dr. Vincent Shantha Kumar, Assistant Professor, Department of Mechanical Engineering, BITS Pilani Dubai Campus; and Dr. Pramod Padole, Director, Visvesvaraya National Institute of Technology (VNIT), Nagpur.

The Inauguration ceremony began with the Lightening of E-lamp and Preamble by Convener Dr. Ashok Keche. He started by welcoming Chief Guest for the event Prof. (Dr.) Pramod Yeole. He emphasized on the inspiration behind organizing of the International Conference in Online mode, wherein even the pandemic situation cannot restrain the researchers and academicians from collaborating to discuss their recent works. He mentioned that the conference has received good quality of research papers from students, academia, research and industry as well.

The Conference has arranged Keynote Sessions from eminent Researchers from Abroad as well as from India. The Keynote Session on “Hybrid machining: Overview and Applications of Micro/ Nano Machining” by Dr. Mustafizur Rahman was the highlight of the Conference.

Day 1 of the conference also saw Keynote Session by Dr. Srinivasa Rao Pedapati on “Recent Trend in Friction Stir Welding & Processing” which concluded that this field is a thrust area for budding researchers. The Keynote Session by Dr. Vincent Shantha Kumar on “Bulk Metallic Glasses” also highlighted the properties and applications of these new class of material.

Day 2 has Keynote Session by Dr. Pramod Padole on “Applications of Mechanical Engineering in Biomechanics” and the conference will end with Valedictory function. With the motivation and support from Director General Prof. Munish Sharma; the Organizing Team was congratulated by all the dignitaries for their commitment and drive in organizing this Online International Conference.

The Inauguration Session was hosted by Dr. Swamini Chopra, Assistant Professor – Research, Mechanical Engineering Department, MIT Aurangabad and the Vote of Thanks for the ceremony was proposed by Dr. Chetan Kuthe, Assistant Professor, Mechanical Engineering Department, MIT Aurangabad.

# WEBINAR

## "Design Thinking, Critical Thinking and Innovation Design"



**Mr. Tukaram Varak**  
(CAD CAM GURU)

Report on one day workshop conducted by Mechanical Engineering Department in association with Institution's Innovation Council (IIC) on the Topic of "Design Thinking, Critical Thinking and Innovation Design" (Online) on Wednesday, 06th January 2021.

The Speaker details along with the session schedule is mentioned below

Session 1 by Mr Tukaram Varak (CAD CAM Guru) at  
Time: 11.30 am to 12.30 pm

In this session the speaker, had given the insights about the design thinking and critical thinking by giving various examples. They also share their experiences . After her session participates able to creative and innovative thinking.they change the thinking perspective of participants. He also told the importance and opportunities of innovative thinker in Mechanical Engineering. The session was largely appreciated by the participants.

The session was anchored by Dr. Swamini Chopra Madam and The vote of thanks was given by Dr. A J Keche.

Session 2 by Mr. Prasad Kokil (M.D., Sanjay Technoplast Pvt. Ltd.) at Time: 1.30 pm to 2.30 pm



**Mr. Prasad Kokil**  
(MD Sanjay Technopath Pvt. Ltd.)

In this session the speaker, had elaborated about the design thinking and critical thinking and Innovation by giving realistic examples of vehicles and pens of different styles and stress the need of innovation and its importance.

The session was anchored by Dr. Swamini Chopra Madam and The vote of thanks was given by Dr. A J Keche. Total 195 participants registered for this one day workshop (online) of which 143 were students , 46 were faculties and 6 were industry and others persons. Each session were followed by question answer session.

Faculties namely Dr. Swamini Chopra, Mr. A S Gore, Mr. M N Farooqui and Mr. S B Patil contributed towards successful completion of the workshop.

# WEBINAR

## **Entrepreneurship and Innovation as a career opportunity.**



**Mr. Prashant Kulkarni**  
(CAD CAM GURU)

One day workshop conducted by Mechanical Engineering Department in association with Institution's Innovation Council (IIC) on the Topic of Entrepreneurship and Innovation as a career opportunity (Online) on Thursday, 07th January 2021. The Speaker details along with the session schedule is mentioned below

Session 1 by Mr Prashant Kulkarni (CAD CAM Guru) at  
Time: 11.30 am to 12.30 pm

The entire session was extremely interactive session. He initially started off by defining the words entrepreneurship and gave a clear idea of the same. "Entrepreneurship is not a career" he quoted and explained in detail how an individual can launch her start-up. Mr. Prashant Kulkarni boosted the confidence of all the attendees with his interactive presentation and encouraged them all to believe in themselves. He stressed that Entrepreneurship cannot be viewed as a business purely, but as a rich legacy for generations to prosper.

In this session the speaker, had given the explained about the entrepreneurship by giving various examples. The session was anchored by Dr. Swamini Chopra Madam and The vote of thanks was given by Dr. Swamini Chopra Madam.

Session 2 by Dr. V S Deolankar (M.D., Manu Electricals Pvt. Ltd.) at Time: 1.30 pm to 2.30 pm



**Dr. V S Deolankar**

(M.D., Manu Electricals Pvt. Ltd.)

In this session the speaker, had shared about experiences on the need of innovation and its importance. He also shared his views on business development and growth. The session was anchored by Dr. Swamini Chopra Madam and The vote of thanks was given by Dr. A J Keche.

Total 224 participants registered for this one day workshop (online) of which 171 were students , 41 were faculties and 11 were industry and others persons.

Faculties namely Dr. Swamini Chopra, Mr. A S Gore, Mr. M N Farooqui and Mr. S B Patil contributed towards successful completion of the workshop.

# WEBINAR

**“You 3.0 How to present yourself in interview.”**



**Mr. Anand Tamboli**  
(Global speaker)

The online webinar on “You 3.0 How to present yourself in interview” dated 12/12/2020 by Mr. Anand Tamboli organized by Basic Sciences and Humanities Department and Mechanical Engineering department scheduled from 10.30 am to 12.30 pm. Mr. Anand is an entrepreneur and innovation expert who is obsessed with bringing ideas to life and make them work for everyone. For the past 20 years, hundreds of businesses and thousands of individuals have been able to see the impact of Anand’s work in helping them bring their ideas to life.

The session was very interesting and provoking and it gives a completely different perspective

of looking interviews. Mr. Anand Tamboli explained all the require things in candidate.. Mr. Tamboli told about their experience of works with entrepreneurs, helping them make their ideas and strategies a reality.He also told how to build leadership brand. Mr. Tamboli said he already coaches to high caliber professionals, speakers, and leaders for building their thought leadership brand.

Participants found his talks candid, deeply meaningful and full of common sense with humor. All the sessions were hosted and Coordinated by organizing committee members Dr.B.G.Toksha, Prof T.P.Kulkarni. The session was largely appreciated by the participants. After the session all participants received a copy of E-book "You 3.0: A powerful strategy to achieve professional goals with self-discovery and personal branding"

**Around 32 participants were present for the online session.**

# PLACEMENT

In this year more than 40 budding engineers were placed in various companies of mechanical engineering department from Maharashtra Institute of Technology, Aurangabad.

Companies including

Goodyear South Asia Tyres Pvt Ltd Aurangabad

BYJU's Think & Learn Pvt Ltd

Jaro Toppscholars Private Limited

Kale Group of Industries

Sanjeev Auto Parts Pvt Ltd

NRB Bearing Ltd, Aurangabad

Balkrishna Tyres, Aurangabad

Badve Engineering, Aurangabad

Duro Auto ,Pune

Hariom Engineering, Chikalthana, Aurangabad

AITG I invent lab, Railway Station MIDC, Aurangabad

Shree Placing Aurangabad

Mongi Engineer, Pune

Varroc

Liebherr

Accreat Electromech Pvt.Ltd

Perkins India

These were a few companies which offered good pay packages to students. Out of these some students were placed through In-plant training offered by the institute for a period of 6 months in various industries and is unique features of the institute.

Due to the pandemic that most of the college has less placement than the previous year, campus placement or campus recruiting is a major factor in one of the most important aspects in the life of any graduate student, but on this year 20-21 our college has a large amount of college placement students in various companies and businesses, some of them as follows

Sheeban Akthar	Jaro Toppscholars Private Limited	12.02
Mosaib Qureshi	BYJU's Think & Learn Pvt Ltd	10 lac
Shrikant Joshi	Balkrishna Tyres, Aurangabad	3.6 lac
Akash Gaikwad	Balkrishna Tyres, Aurangabad	3.6 lac
Mahesh Tathe	Balkrishna Tyres, Aurangabad	3.6 lac
Pramod Kashid	Balkrishna Tyres, Aurangabad	3.6 lac
Polge Shreyas Shrikant	Infosys,pune	3.6 lac
Lokhande Kiran Janardhan	Infosys,pune	3.6 lac
Parvatkar Narayan	Hariom Engineering	3.5 lac
Somnath	Goodyear South Asia Tyres	2.4 lac
Satyaprakash Vispute	Aitg I Invent Lab,Aurangabad	2.44 lac

# PROJECT

## Design and development of the agriculture chemical pesticides spray pump with ropeway



Agricultural sprayer is a device used to spray a liquid, where sprayers are commonly used for projection of water, weed killers, crop performance materials, pest maintenance chemicals, as well as manufacturing and production line ingredients. In agriculture, a sprayer is a piece of equipment that is used to apply herbicides, pesticides, and fertilizers on agricultural crops.

## Objectives :

1. To give farmers more ergonomic working environment while spraying because they don't need to lift or carry the poison tank.
2. To add more efficiency to spraying because contains more than one nozzle. When do the spraying process, both wings of host will flow the liquids to the plans.

## Problem statement:

Existing pesticide sprayer is heavy and hard to carry. they takes so much time to spraying in the farm. some poison sprayer is less efficient because only provided with one host and one nozzle.

## Conclusion :

Design the eco-friendly spray pump with ropeway arrangements system. This system is used to reduce the man effort. It is less costly and easy to handle.

# IDEATHON

## COVID-19 Innovation Ideathon

The "COVID-19 Innovation Ideathon" is organized by TATA technologies and Ready engineer. The total 90 teams Participates from 2I engineering colleges associated with Ready engineers programme. In this event the SENTINELS this team participate from our college. and SENTINELS won the

IDEATHON. The team members of SENTINELS is Mr. Rahul Shrivastava (Mech), Mr. Vikaspuri Goswami (Mech), Ms. Sapna Ghunawat (Agri). and the Mento of team was Dr. Ashok J. Keche (Associate professor & Head).

SENTINELS got financial assistance 50000/- rupees with mentorship, technical support and incubation from MASSIA IFC and TATA TECHNOLOGIES for product development, production and marketing.



Mr. Rahul Shrivastava  
(Mech-Team Leader)



Mr. Vikaspuri Goswami  
(Mech-Team Member)



Ms. Sapna Ghunawat  
(Agri-Team Member)