



# MECHAZINE

## DEPARTMENT OF MECHANICAL ENGINEERING Government Polytechnic, Mumbai

(An Autonomous Institute of Government of Maharashtra)  
49, Ali Yavar Jung Marg, Kherwadi, Bandra (East), Mumbai – 400 051  
Website: www.gpmumbai.ac.in

Published on 2<sup>nd</sup> April 2020

Semi-Annual e-Newsletter

AY 2019-20 Volume 1, Number 2

Mrs. Swati D. Deshpande,  
Principal

### Editor in Chief:

Mr. D. H. Kamble, Head,  
Mechanical Engg.  
Department

### Executive Editors :

Mr. U. A. Agnihotri  
Dr. V. U. Rathod,  
Lecturer in Mech. Engg,

### In This Issue

- Preamble
- Vision, Mission
- An article for everyone
- Achievements of Department
- Inplant training
- Expert Lectures
- Industry visits
- Students Participation
- MoU's
- Kalpak 2020
- Faculty Trainings
- Publications
- Sports
- Campus Placements
- School Connect
- Academic Quality assurance
- Faculty details
- Corona Virus: Attack on human being

### Preamble

Purpose of this e-newsletter is to publish the major accomplishments during **even term of academic year 2019-20**. The newsletter provides the glimpses of activities accomplished. This newsletter will certainly help to build the reputation of Mechanical Engineering department and will strengthen the relationship with stakeholders. It's the genuine attempt to encourage, & stimulate a positive response mainly to students and faculty members. Suggestions from various stakeholders are most welcome to make this magazine more accurate and presentable.

### Vision, Mission

#### The Vision of Government Polytechnic Mumbai

Transform knowledge into work

#### The Mission of Government Polytechnic Mumbai

We are committed to:

- Quality education for lifelong learning.
- Need based educational programmes through different modes.
- Outcome based curriculum implementation.
- Development and up gradation of standard laboratory practices.
- Promoting entrepreneurial programmes.

We believe in ethical, safety, environmental friendly practices and teaching learning innovations.

#### The Vision of Mechanical Engineering Department

To promote sustainable development of students.

#### The Mission of Mechanical Engineering Department

We are committed to:

- Implement need-based curriculum.
- Provide opportunity for lifelong learning through continuing education.
- Blend the latest technology with conventional practices through experiential learning.
- Enhance industry institute interaction.
- Promote entrepreneurial capabilities.

We believe in high ethical and moral values, safety and environmental friendly practices

## ONLINE LEARNING: NEED OF TIME

### What is Online Learning?

Online learning is one of the emerging method of remote education. It is a method of erudition of educational information via the internet instead of in a physical classroom. There are different methods of online learning, ranging from simple downloadable content, to the structured programmes that include assessment and award of certificates, grades etc.

### Why online Learning?

Online learning fulfills the demand of students who cannot participate in traditional classroom learning. These learners are unable to attend traditional classes due to unavailability of a particular class at their institution, live in remote locations, work full-time and can only study at or after work, and simply prefer to learn independently. Online learning proves to be a great alternative for such students. Students have the chance to study in their own time and especially for free. It represents a great way to study many fields and to boost the level of self-motivation.

### Benefits of online learning

An important benefit of online learning includes i. Flexible schedule and environment, ii. Career advancement and hobbies, iii. More flexibility, and low cost, iv. Self-discipline and responsibility, v. More choice of course topics, vi. Student-centered teaching approaches, vii. 24 x7 accessibility to course materials, viii. Providing just-in-time methods to assess and evaluate student progress, ix. Work in the comfort of your own home or office, x. Accommodates different learning styles using a variety of delivery methods, etc.

### Resources and Skills Required for Online Learning

The students should have following resources and skills for effective online learning:

- Access to a computer, and Internet.
- Good organization and time-management skills.
- Familiar with Web browsers and an email programs.
- Acquaintance with Web-based interactions such as email, discussion boards and chat rooms.
- Proficiency with typing and word processing.
- Experience in successful Internet searches using a variety of search engines.

### Websites for Online learning

There are various websites available for online learning. Below is the list of important website which offers online certification courses. Most of these courses are free to learn.

1. Swayam- <https://swayam.gov.in/>,
2. NPTEL- <https://onlinecourses.nptel.ac.in/>
3. Mooc- <http://mooc.org/>
4. Edx - <https://www.edx.org/>
5. Coursera- <https://www.coursera.org/>
6. Udacity - <https://in.udacity.com/>
7. Udemy - <https://www.udemy.com/>
8. Khanacademy - <https://www.khanacademy.org/>
9. Skillsahre - <https://www.skillshare.com/>
10. Harvard University - <https://online-learning.harvard.edu/>
11. Ted - <https://ed.ted.com/>
12. Alison - <https://alison.com/>
13. Futurelearn - <https://www.futurelearn.com/>
14. Web Development - <https://digitaldefynd.com/best-free-web-development-courses-tutorials-certification/>
15. Digital Marketing - <https://digitaldefynd.com/best-free-digital-marketing-certifications/>
16. ios app development - <https://digitaldefynd.com/best-ios-app-development-course-tutorial/>
17. Open Learn - <http://www.open.edu/openlearn/>
18. Future Learn - <https://www.futurelearn.com/>
19. Tuts Plus - <https://tutsplus.com/>
20. Open Culture - <http://www.openculture.com>
21. National digital library- <https://www.ndl.gov.in>

## Achievements of the Department

DIPEX is India's of the largest and most prestigious state level exhibition competition of projects and models by the students of Diploma, Degree, PG in Engineering/Technology as well as Agriculture in the state of Maharashtra and Goa. and for prestigious state level diploma project exhibition competition DIPEX-2020. Two project groups participated from Mech. Engg. department in DIPEX-2020 under the guidance of Dr. V. U. Rathod, held at Sangmeshwar College, Solapur during 6<sup>th</sup> -9<sup>th</sup> March 2020, and own the following awards



- Best Project Award in DIPEX-2020**

**Project Title:** Vertical Machining Centre (VMC) using GRBL controller

NINAD KISHOR SAMANT FD18ME002

VIRAJ RAKESH GAIKWAD FS17ME010

SHREYAS PRAVIN FS17ME014  
SHIVTARKAR

ANJANI NARDAHE GUPTA FS17ME050

**Project Guide:** Dr. V. U. Rathod



- Women And Technological Innovation Award (WATI) in DIPEX-2020**

**Project Title:** Metal Scroll Bending and Twisting Machine for fabrication of Safety Grills

KANAUJIYA ANKITA DINESH FS17ME029

KOMAL SUTAR FS17ME051

**Project Guide:** Dr. V. U. Rathod



- **Safety Training of L & T employees by Departmental faculties**

Prof. S. V. Joshi, and Prof. U. A. Agnihotri conducted safety training of L & T employees, as per the MoU of an Institute with L & T.



- **Resource persons for Faculty Development Program**

Prof. U. A. Agnihotri, and Dr. V. U. Rathod, delivered keynote sessions in on week DTE sponsored and approved faculty development program titled, 'Quality Improvement and Industry Coordination', organized by Electrical Engg. department of an Institute.



## Inplant Training

**117 students from Third year Mechanical Engg. department were placed in 34 industries for Inplant Training of ONE COMPLETE Semester. List of industries include:**

Ishwar Engg., Andheri, Myco Industries, Andheri, Gujrat Chemiplant, Goregaon, Evergreen Engineering Co. Pvt. Ltd. (Joy Engg.), Galaxy Cloud Kitchen, Andheri RCF, Chembur, Nissi Engg, Ghatkopar, Indian Pneumatics & Hydraulics, Thane, JMS Industries, Rabale, AART Integrated Projects Pvt. Ltd., Sanpada, Navi Mumbai, Ashok Industries, Koperkhairne, Navi Mumbai, NMMT, CBD Belapur, L &T, Powai, NRB Bearings, Rabale, Emkay Fasteners, Thane, CEAT Tyres , Bhandup, Sacardande Engineers Pvt. Ltd., Rabale, Fluidtech Pneumatics, Ambernath, Jindal Steel Vashind, Seaco Pvt. Ltd. Maval, Pune, Milestone Institute of Technology, Thane, Mahindra & Mahindra, Kandivali, Intgeni Energy Solutions Pvt. Ltd, Mumbai, Mega Rubber Technologies Pvt. Ltd. ,Vasai, Laxmi Industries, Vasai, JINS Exim, Vasai, Industrial Engineering Syndicate, Vasai East, Vapcon Manufacturing Engineers, Palghar, National Pneumatic Systems, Vasai, Pragati Switchgears, Vasai, United Technologies, Virar, Eltech Engineers, Dahisar, Mehul Engineering, Mira Road, Wasan Tata Motors Ltd., Kandivali,

## Faculty Interaction with Inplant Trainees



Orientation of Inplant Trainees

At Sacardande Engineers Pvt. Ltd.,  
RabaleAt Emkay Fasteners Pvt. Ltd.,  
Thane

## Expert Lectures

1. Expert lecture by Mr. Yashpal Gautam, Consultant Plant Erection, Commissioning, Operations and Quality Management, on 'Electrical Safety and Precautions in Mechanical Industries', on 17/01/2020.



2. Expert lecture by Dr. W S Rathod, Associate Prof. V J T I Mumbai, 'Advances in Material Science' on 28/01/2020, for second year students.



3. Expert lecture by Mr. Rishikesh Sawant, Design Engineer, Milestone PLM Solutions, on 'CAD/CAM/CAE', Thane, on 11/02/2020, for second year students.,



4. Expert lecture on 'Overseas Opportunities for Mechanical Engineers', by Mr. Amol Parab, An entrepreneur created youbeeteme.com website, and also working as Lead Data Modeler, Blue Shield, of California, San Francisco, on 03/03/2020, for second year students.



**Industrial Visits**

1. Indo Therm Engineering Pvt. Ltd. Thane, on 11/03/2020, for second year students.



ON THE SHOP FLOOR



INDUSTRY EXPERT EXPLAINING THE PROCESS



HUGE HEAT TREATMENT FURNACES

## Students Participation

1. Students of second and third year participated in 'Yono -quiz competition' organized by SBI , held at IIT Bombay on 03<sup>rd</sup> March 2020.
2. Mechanical Engg. Students Association (MESA) organized technical event 'VROOM'. during event technical events like quiz competition, paper presentation, Project competition, Photography, etc. were conducted.



3. Departmental faculty Mr. Ashwini Hagwane arranged day workshop 'Zest-20' under Women's Empowerment for the girls of department as well as of an Institute, on 14<sup>th</sup> Jan. 2020



## MoU's

Department have Memorandum of Understanding with following industries for industry expert lectures, industry visit, Inplant Training, placement of students, and curriculum design etc.

1. Milestone Institute of Technology, Thane
2. Mech-India Engineers Pvt. Ltd., Dombivali,
3. Care Group, Thane
4. Gujrat Chemiplant Private Limited, Goregaon, Mumbai
5. Eltech Engineers, Dahisar
6. Ishwar Engg. Andheri

## Kalpak 2020

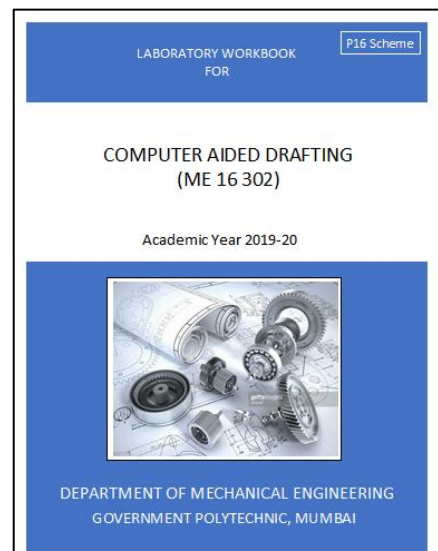
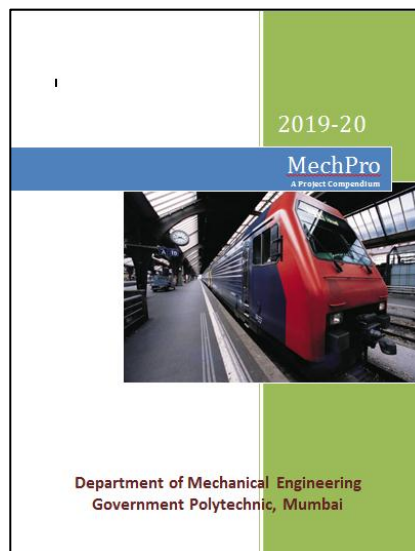
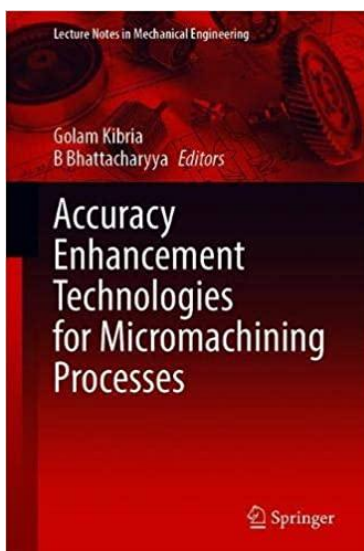


## Faculty Trainings

1. Mr. E.C. Dhembare, and Mr. K. Z. Dhangare, completed the one week STTP on 'Waste Management, Sabusiddik Polytechnic Byculla, Mumbai during 25<sup>th</sup> to 29<sup>th</sup> Feb. 2020.

## Publications

1. Book chapter titled, 'Accuracy Improvement Techniques in Electrochemical Micromachining (EMM)' authored by Dr. V. U. Rathod, is published in edited book titled, ' Accuracy Enhancement Technologies for Micromachining Processes', Springer Publications, Singapore, ISBN: 978-981-15-2116-4 has recently been published in electronic and print format on 21<sup>st</sup> Feb. 2020.
2. Department of Mech Engg. published project compendium 'MechPro' for internal circulation, summarizing an abstract and important features of the term end projects completed during Odd term 2019-20.
3. Laboratory manuals for the subject of Physical Metallurgy, Computer Aided Drafting, Hydraulic Machines, Thermal Engineering, Machine Design etc. have been prepared.





## Sports

Departmental students participated in various sport activities at institute level, zonal level organized under IDESSA. Different game includes-



## Campus Placements

Campus placement activity is performed in tune with the Training and Placement officer. Placements completed till the end of March 2020, is summarized as below:

Sr. No.	Name of the Company	No. of students appeared	No. of students selected	Remark
1.	L & T, Mumbai	12	1	Jr. Engg. Trainee, (2.39 L P.A.)
2.	Godrej and Boyce Mfg. Pvt. Ltd.	21	7	Trainee Engineer, (1.8 L P.A.)
3.	Tata Power	6	nil	Sup. Trainee, (2.8L P.A.)
4.	Shivam Auto, Maruti Service Centre, Mumbai	02	In- Process	Technician, (96K P.A.)



## School Connect

For career guidance, to disseminate information about the diploma courses, to SSC students, departmental faculties visited about 50 different schools in Mumbai and Thane district. Students of these schools were made aware about the opportunities after completion of Diploma courses.



## Academic Quality Assurance

1. To ensure the quality of academics, department wise internal academic monitoring committees are formed. This committee confirms the quality of academics during every semester on different parameters. This committee visited the department on 8<sup>th</sup> March 2020.
2. External academic monitoring committee appointed by MSBTE also verifies the quality of academics during every academic year. This committee visited the institute/department on 11<sup>th</sup> March 2020.



3. In addition to above, to improve the quality of teaching learning process, for effective implementation of P19 scheme as per its theme, departmental Quality Improvement Committee (QIC) have been formed. The committee consists of Head of Dept., as a chairman, departmental academic coordinator, and Senior faculty members from the department.

### Moments to Remember

1. Senior faculty member Mr. A. D. Kurumbhate, retired after serving in department about 35 years.



2. Celebration of Marathi Bhasha Din on 07<sup>th</sup> March. Granth Dindi in a Campus.



## Faculty Details

Department has highly qualified staff, with vast experience in academics. The list includes:

Sr. No.	Name of Faculty	Educational Qualification	Remark
1.	Mr. D. H. Kamble, Head of Department	DME, BE (Mech.), M.E. (Machine Design), LLB, Ph. D. (Pursuing)	
2.	Mr. S. V. Joshi, Sr. Lecturer	B E (Mech.), M. Tech. (Prod)	
3.	Mr. N. N. Ansari, Sr. Lecturer	LME, AMIE, M. Tech.	
4.	Mr, A. D. Kurumbhate, Sr. Lecturer	B E (Mech.)	Retired
5.	Dr. S B Mahagaonkar, Sr. Lecturer	Ph. D. (Mech.)	
6.	Dr. A. A. Lonkar, Sr. Lecturer	Ph. D. (Mech.)	
7.	Mr. U. A. Agnihotri, Sr. Lecturer	M. Tech.	
8.	Dr. V. U. Rathod, Sr. Lecturer	Ph. D. (Mech.)	
9.	Mr. Y B Jamnik, Lecturer	B E (Mech.), ME(Pursuing)	
10.	Mrs. A. R. Hagawane, Lecturer	B E (Mech.), ME (Design)	
11.	Mr. E. C. Dhembare, Lecturer	B E (Mech.), ME (Pursuing)	
12.	Mr. K Z Dhangare, Lecturer	B E (Mech.), ME (Pursuing)	

## Corona Virus: Attack on Human Being

Institute remained closed since 16<sup>th</sup> March 2020 onwards, as per the instruction given by the government time to time, to prevent the spread of deadly Corona virus.

During this lockdown period faculty members tried to work from home, engaged the students via online learning modes. Work from home for online learning of students included the providing the study materials, notes, online videos, interactive sessions, crosswords, online quiz, and fulfilling the doubts of the students via mail, phone, and whats app group formation.

**NOTE: THIS VOLUME OF NEWSLETTER IS DEDICATED TO THE DOCTORS AND THEIR SUPPORTING STAFF, POLICE OFFICERS AND THEIR STAFF, PHARMACISTS, ESSENTIAL SERVICE PROVIDERS AND ALL OTHERS WHO HAVE CONTRIBUTED DIRECTLY OR INDIRECTLY TO FIGHT AGAINST DEADLY CORONA VIRUS.**