



MECHAZINE

THE DEPARTMENTAL NEWSLETTER



MECHANICAL ENGINEERING DEPARTMENT

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L. E. College, Morbi

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HIGHLIGHTS:

- ❖ *Departmental Activities*
- ❖ *Farewell Ceremony*
- ❖ *Project Fair 2021*
- ❖ *International Yoga Day*
- ❖ *Faculty Corner*
- ❖ *Student Corner*

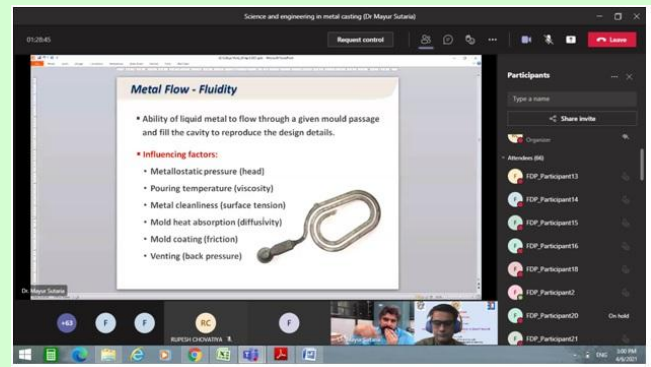
Departmental Activities

❖ One Week Online STTP

In this COVID-19 pandemic period, Mechanical Engineering Department, L. E. college-Morbi had organized one week online short term training program (STTP) on "Recent Trends in Advanced Manufacturing Processes", sponsored by GUJCOST-DST and supported by CTE during 5th April to 9th April 2021. The major aim of STTP was to enrich the knowledge and skills in advanced roots of manufacturing and to bring together the academicians, researchers and industry professionals in the domain of manufacturing to contribute towards the "Make in India". Total 88 participants from various institutes have taken benefit of it. Dr. P. B. Tailor & Prof. V. B. Patel convened and Prof. R. N. Chovatia and Prof. K. K. Dave have coordinated the STTP.



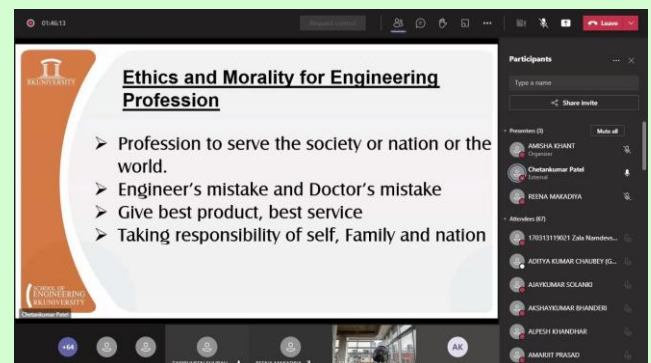
Inaugural Session of "Recent Trends in Advanced Manufacturing Processes"



Online session of STTP

❖ Organize Expert Session

An expert talk was arranged on 20th March, 2021 for all the students of Mechanical Engineering Branch. Dr. Chetan Patel, Head of Mechanical Engineering Department, RK University Rajkot delivered an informative talk on "Moral and Ethical Principles in Engineering Profession".



Online lecture presentation

Around 88 students attended the above session and learned about importance and necessity of moral and ethical values in engineering profession.

Departmental Activities

❖ Farewell Ceremony

A farewell was organized by Mechanical Engineering Department for a senior staff member Shri Mahendrabhai J. Rathod on his superannuation. He served the department and institute for more than 40 years. Prof. P. B. Tailor

(HOD, Mechanical Department) and other faculty members attended the farewell ceremony arranged at mechanical department seminar hall on the pleasure evening of 31st May, 2021. The entire ambiance was so warm with outpouring emotions of the retiring staff. Shri M. J. Rathod was facilitated with showl, shreefal, sweets and a memento as remembrance of the event.

“Every new beginning comes from some other beginning’s end”



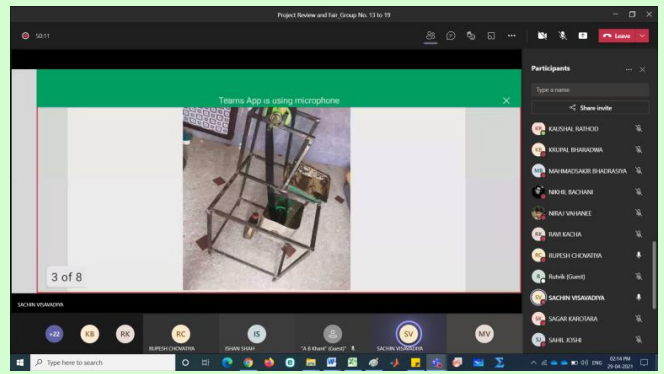
Presenting Memento to Shri M. J. Rathod



Group photograph with Shri M. J. Rathod

Project Fair 2021

An online Project fair was organized by Mechanical Engineering Department with the final year students on 29th April, 2021. Total 19 different groups participated actively and showed their innovative ideas through online presentation, simulation and working models.



Model/Prototype of projects

The junior students of the departments also attended the online project fair, interacted with the final year students and learned from the fair. The best three projects were selected and their titles are:

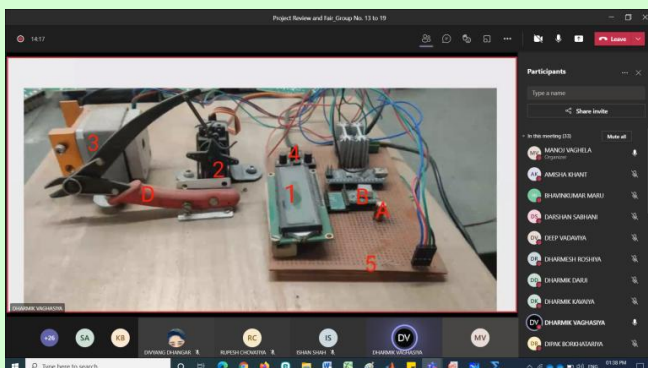
1. Design and development of Lakh Seal Gun
2. Fingerprint Based Starting Ignition System
3. Automatic Wire Cutting Machine

“International Yoga Day”

“International Yoga Day” was organized on 21st June, 2021 to celebrate health and happiness. This year International Yoga Day was celebrated online through zoom platform for 3 days (19th, 20th & 21st June, 2021). The yoga sessions were taken by certified yoga tutor Ms. Vaishali Shah. The online yoga sessions included the Morning Prayer, Sun Salutations and its variations, different hand/leg exercises, yogasans and pranayams. She taught the breathing technique to prevent the covid infection, to increase lungs capacity and improves immunity. Mechanical engineering department staff attended the programme and performed yoga enthusiastically.



Faculties doing yoga/pranayams



❖ Faculty Training

Following faculty members successfully completed trainings/webinars/development programs:

- Total 6 faculties members of mechanical department attended an online short term training program (STTP) on “Recent Trends in Advanced Manufacturing Processes” sponsored by GUJCOST-DST, supported by CTE and organized by Department of Mechanical Engineering, Lukhdhirji Engineering College, Morbi; during 5-9 April, 2021.
- Online MOOC courses under NPTEL were also successfully completed by various Faculty members, the details of which are as follows:
 - Prof. R. N. Makadia & Prof. A. B. Khant – Mechanical Measurement System
 - Prof. A. N. Dave - Kinematics of Mechanisms & Machines
 - Prof. H. N. Jani – Introduction to Industry 4.0 and Industrial Internet of Things
- Prof. H. N. Jani, successfully completed one week online training program on “Universal Human Values in Education”, organized by AICTE, 19th April, 2021 to 23rd April, 2021.
- Prof. D. B. Patel & Prof. H. D. Patel, successfully completed one week online training program on “Universal Human Values in Education”, organized by AICTE, 22th March, 2021 to 26th April, 2021.

❖ Expert Talk Delivered

- Prof. V. B. Patel delivered an online expert lecture on “Foundry: Introduction & Basics, Casting Processes, Advancement in Al-Si Alloy Casting” at AICTE-GTU sponsored FDP on “Metallurgy for All”, organized by Metallurgy Department, GEC Gandhinagar from 1st Feb, 2021 to 6th Feb, 2021.
- Prof. V. B. Patel delivered an online expert lecture on “Advance techniques for casting of Al-Si alloy and its applications ” at GUJCOST-DST sponsored and CTE supported online short term training program (STTP) on “Recent Trends in Advanced Manufacturing Processes” organized by Mechanical Engineering Department, Lukhdhirji Engineering College, Morbi, from 5th -9th April, 2021.

❖ Faculty Achievements:

- Prof. C. A. Maradia, obtained his Ph.D. degree from Gujarat Technological University, Ahmedabad. He delivered his Ph.D. Viva Voce online presentation on his research topic "Analysis of heat transfer in conical shell and circular tube heat exchanger" under the

guidance of Dr. Jeetendra A. Vadher on 6th April 2021.

- Prof. V. B. Patel has performed as reviewer in GUJCOST sponsored 1st International Conference on Recent Progress in Material Science and Mechanical Engineering (ICRPMSME-2021), jointly organized by GEC, Gandhinagar and GEC, Patan on 28th & 29th May, 2021.

❖ Paper Publication

- Prof. V. B. Patel and Yuvrajsinh Rao published a research paper titled, “Effect of Welding Parameters on Stainless Steel MAG Welding : A Review”, in Journal of the Maharaja Sayajirao University of Baroda, Vol.- 55, No.1 (III)2021, ISSN: 0025-0422.
- Prof. V. B. Patel, Gaurang R. Rohit & Jagdish M. Prajapati published a research paper titled, “Structural Shape Optimization By Coupled FE-MM and Swarm Intelligence-Based Algorithm”, in International Journal of Computational Methods, Vol. 18, No. 04, 2050048 (2021).

 Student Corner

❖ Student Placement

The Mechanical Department congratulates to following students and wishes them a great career for getting job in campus placement.

1. Hemang Trivedi – Ashapura Perfoclay Ltd., Bhuj
2. Lucky Bhat - Jupiter Roll Forming Pvt. Ltd., Rajkot
3. Bhadrasiya Mahmad Sakir – Global CNC Automation, Rajkot
4. Mahmadaadil S. Piludiya- Turbo Marine Pvt. Ltd., Morbi.

❖ Paper Presented

- Krupal Bharadwa (180313119003), 8th semester student, published a paper titled “Vibro finishing Machine”, in International Journal of Science and Research (IJSR), April 2021.

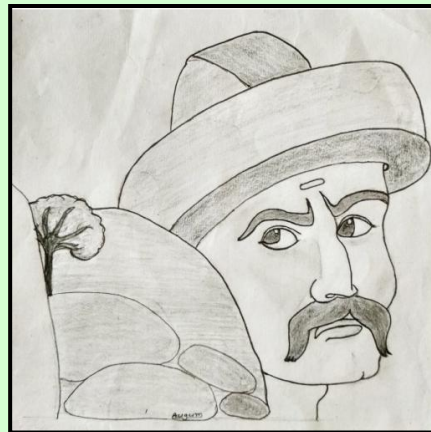
❖ Student Achievement

- Jay Padaliya, a final year student, was awarded, "Best Campus Ambassador" by Shri. J. B. Patel, Collector, Morbi district for his great contribution to the voter campaign in Morbi district. In this pandemic situation, he worked hard to make the society aware about the importance of Voter ID, the process to obtain it, the process of changing the address/name. The Mechanical Department congratulates him for his great work.



Receiving award from Shri. J. B. Patel

- Around 10 students of 2nd semester attended online webinar on “Fire Safety Awareness”, organized by GTU, Ahmedabad, 12th June, 2021.



**Aagam Dasadiya, 8th semester
(170310119013)**

INSTITUTE MISSION & VISION

❖ *Vision of the Institute*

To provide quality engineering education and transforming students into professionally competent and socially responsible human being.

❖ *Mission of the Institute*

- ❖ To provide a platform for basic and advanced engineering knowledge to meet global challenges.
- ❖ To impart state-of-art know-how with managerial and technical skills.
- ❖ To create a sustainable society through ethical and accountable engineering practices.

MECHANICAL ENGINEERING DEPARTMENT MISSION & VISION

❖ *Vision of the Department*

To deliver quality engineering education for mechanical engineers with professional competency, human values and acceptability in the society.

❖ *Mission of the Department*

- ❖ To nurture engineers with basic and advance mechanical engineering concepts.
- ❖ To impart Techno-Managerial skill in students to meet global engineering challenges.
- ❖ To create ethical engineers who can contribute for sustainable development of society.

Program Educational Objectives (PEOs) of the Department

1. Apply their knowledge of basic science and engineering to analyze and solve problems related to mechanical engineering.
2. Able to design and develop the new system/process using advanced technologies and tools.
3. Enhance professional practice to meet global challenges with their ethical and social responsibility.

Program Specific Outcomes (PSOs)

1. Students will be able to apply the knowledge of computer aided tools for design and development of products based on engineering principles.
2. Students will be able to manage production of components/systems using conventional and advanced manufacturing methods.

EDITORS:

1. Prof. Amisha B. Khant
2. Prof. Renu C. Ghanghas

STUDENTS COORDINATORS:

1. Mohit Sikotra (8th Sem)
2. Jeet Makwana (8th Sem)