



MECHAZINE

THE DEPARTMENTAL NEWSLETTER



MECHANICAL ENGINEERING DEPARTMENT

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L. E. College, Morbi

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HIGHLIGHTS:

- ❖ *Student Orientation Program*
- ❖ *Departmental Events*
- ❖ *Namo E-Tab Distribution*
- ❖ *Industrial Visit*
- ❖ *Student Achievement*
- ❖ *Faculty Corner*
- ❖ *Student Corner*



Mechanical Departmental Events – September 2019

- ❖ Mechanical Engineering Department organized 8 various technical and non-technical events during 20th to 27th September 2019. The main objective of these events was to fulfill their 100 Points Criteria through various extracurricular activities. The students participated in the events enthusiastically in large numbers and came up with new and creative ideas in the field of mechanical engineering. The main highlights of these events are as below:

Student Orientation Program -2019

Our department had organized Student Orientation Program -2019 for newly joined students on Thursday – 18th July 2019. Head of the department Prof. P. B. Tailor had delivered interesting and informative speech to new students. Prof. A. B. Khant shared presentation regarding introduction to L. E. College, Morbi which was followed by an introduction to Mechanical Engineering Department and Induction program 2019 by Prof. L. M. Rola. The program was ended with national anthem.



Group Discussion



Swachhta Abhiyan



Reasoning and Aptitude Test



Box Cricket



Poster Presentation

❖ *Reading of Chicago Speech of Swami Vivekanandaji*

Mechanical Engineering Department had organized an event on 27th September 2019 in the memory of 150th Anniversary of a Historic Speech delivered by Swami Vivekanandaji in the Dharam-parishad at Chicago on 27th September 1883. In this even the same unforgettable speech was read at the department. In total 74 students of all semesters and 11 teaching staff, including Head of Department have participated in the event. This event was organized at Conference Hall of Mechanical Engineering Department.



'Namo E-Tab' Distribution Program -2019

Mechanical Engineering department organized Namo-e Tablet distribution program on 26th November 2019. Head of Mechanical Engineering Department, Prof. P. B. Tailor addressed the event. Prof V. P. Pandya explained the aim of this Gujarat Government scheme is to help meritorious students get better aid in their higher education and encourage current aspirants to work harder. Afterward, all the faculty members along with class coordinators Prof. A. B. Khant and Prof. L. M. Rola distributed the tablets among 1st semester Mechanical Engineering students.





Industrial Visit

Industrial visit was organized by the Mechanical Engineering Department with a view to impart technical knowledge of the Mechanical Engineering field among the students. Total 48 students of 1st Semester, along with 3 faculty members, Prof. K. K. Dave, Prof. A. B. Khant and Prof. L. M. Rola, had visited Astila Ceramics Pvt. Ltd. Morbi on 16th October 2019. This visit is helpful to understand practical aspects of Design and Manufacturing Processes subjects of Mechanical Engineering.



Faculty Corner

❖ **Faculty Training**

Following Faculty members successfully completed trainings/development programs:

- Prof. P. B. Tailor and Prof. V. B. Patel, “NBA Accreditation”, held during 23th to 27th September 2019 which was jointly organized by NITTTR Bhopal and Directorate of Technical Education, Gujarat State, held at AVPIT, Rajkot.
- Prof. R.N.Chovatiya, "Simulation Using CATIA software", held during 16th to 20th September 2019 at NITTTR Bhopal.
- Prof. H. D. Patel, “Global Initiative for Academic Networks”, held during 7th to 11th October 2019 at L.D College of Engineering, Ahmedabad funded by MHRD.

- Prof. L. M. Rola, “Induction Phase –I training program”, conducted during 11th to 22th February 2019 at NITTTR Extension Centre Ahmedabad.
- Prof. A. N. Dave, “Induction Phase –II training program”, held during 18th to 29th November 2019 at NITTTR Extension Centre Ahmedabad.
- Prof M. B. Vaghela, “Design Modeling and Simulation of Advance Composite Structures Using FEM Softwares (MATLAB, ABAQUS and ANSYS)”, held during 9th to 13th December 2019 at SVNIT Surat, sponsored under Teqip III
- Prof. M. B. Vaghela, faculty Development Program on “Students Enovation and Start ups” conducted during 17th to 21st December 2018, jointly organized by EDII and SSIP Cell, Education Department at EDII Campus Gandhinagar.
- Online MOOC courses under NPTEL are also successfully completed by various Faculty members, the details of which are as follows:
 - Prof. P. B. Tailor and Prof. V. B. Patel – Accreditation and Outcome Based Learning
 - Prof. R. N. Chovatiya - NBA Accreditation and Teaching-Learning in Engineering
 - Prof. H. M. Shah - Applied Thermodynamics for Engineers
 - Prof. H. N. Jani - Steam Power Engineering
 - Prof. H. D. Patel - Course On Vibration & Structural Dynamics
 - Prof. C A Maradiya - Refrigeration And Air Conditioning
 - Prof. R. C. Ghanghas - An Introduction to Materials: Nature and Properties (Part 1: Structure of Materials)

❖ **Expert Lectures**

- Prof. V. B. Patel delivered expert lectures on “1. Non Ferrous Melting Practices and 2.Heat Treatment of Non Ferrous Casting” in one week STTP on “Processing and characterization of materials”, organized by Metallurgy Department, GEC Gandhinagar & IIM, Baroda chapter, 4th November, 2019 at GEC, Gandhinagar.
- Prof. V. B. Patel delivered an expert lecture on “Aluminum- Silicon Cast Alloys: Processing and Characterization” in one day seminar organized by Department of mechanical engineering, CSPIT, at CHARUSAT, 9th October, 2019
- Prof. V. B. Patel delivered an expert lecture on “Fundamentals of Metal Casting” at GEC, Patan 23rd December, 2019
- Prof. V. B. Patel delivered an expert lecture on “Melt Treatment of Non-Ferrous Materials” at GEC, Palanpur 24th December, 2019

❖ Patent Filed

Prof. M. B. Vaghela along with his team members, Parth Shingala, Savan Talaviya, Prof. Bharti B. Parmar, Prof. Pranav D. Raval, has filed an Utility patent, titled "A SMART APPARATUS FOR SPRAY PESTICIDE AND METHOD THEREOF", (Patent Application No: IN 201921039884)

❖ Paper Publication

Prof. M. B. Vaghela, paper titled "Numerical Analysis of an Edge Crack Isotropic Plate with Void/Inclusions under different loading by implementing XFEM", has been accepted in Journal of Applied and Computational Mechanics on 27th November 2019.

- Ankit Shukla, Manish Vaghela, Prof. M. B. Vaghela, "Lakh Seal Gum", ICOSTART'19, International Research Conference on Innovations, Startups and Investments at RK University Rajkot on 16-17 December 2019.
- Mahmadaadil S. Piludiya, Punit Rathod, Mohit Sikotra, Prof. J. H. Solanki, "Fingerprint Base Starting Ignition System", ICOSTART'19, International Research Conference on Innovations, Startups and Investments at RK University Rajkot on 16-17 December 2019.

✚ Student Corner

❖ Paper Presentation

- Manish Vaghela, Pavan Patil, Prof. M. B. Vaghela, "Design and Development the Auto Tooth Brush", ICOSTART'19, International Research Conference on Innovations, Startups and Investments at RK University Rajkot on 16-17 December 2019. **Awarded as best presented paper.**
- Ankit Shukla, Manish Vaghela, Prof. M. B. Vaghela, "Design and Develop the Auto Rajor", ICOSTART'19, International Research Conference on Innovations, Startups and Investments at RK University Rajkot on 16-17 December 2019.

❖ Sketch of Lord Krishna



By: Mohit Sikotra (Sem 6)

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.

❖ EDITORS:

1. Prof. Hiral M. Shah
2. Prof. Amisha B. Khant
3. Prof. Renu C. Ghanghas

❖ STUDENTS COORDINATORS:

1. Mitesh Vaghela (8th Sem)
2. Mohit Sikotra (6th Sem)
3. Jeet Makwana (6th Sem)