

VOL. 1

ISSUE 1

2018-19

DEPARTMENT OF MECHANICAL ENGINEERING

🎯 **VIBRAZONE eNewsletter** 🎯



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FROM PATRON'S & DIRECTOR DESK

Learning is a lifelong process. Education is more important affair in our life than learning or being literate. The newsletter is a good way to learn about developments and activities and let others know. I congratulate all the people who have been associated with this publication.

DR. R K Agrawal
Chairman



It is wisely said that change is the only thing that is permanent in life. So be it, for the department as well. Since this is for first time, the E-newsletter is introduced, I congratulate the editorial board, advisory board and the department for the very first step towards online publication. I hope everyone would be benefited with it.

Mr. Pankaj Agrawal
Vice-Chairman



As we all know, a newsletter mirrors a college, a department, its vision and mission. It also highlights events, activities and academic process and achievements. I congratulate the department for its first E-newsletter. I do hope that this will encourage many more including students to use it as a platform to express their creativity.

DR. L K Tyagi
Director



FROM HOD'S DESK

The spirit of improvement is not always a spirit of liberty; for it may aim at forcing improvement on an unwilling people.

Mechanical Engineering is the largest of the engineering disciplines and a large number of mechanical engineers go into manufacturing of computer and electronic products, machinery and transportation equipments.

The department cares for student support, mentoring, tutoring, study skills workshops and career development. Mechanical Engineering students culminate their studies with a year-long capstone project requiring design problem solving, creative thinking, project planning and teamwork. A broad selection of technical electives encourages students to pursue special interests in design and manufacturing, energy and environmental issues, thermal and fluid sciences materials, dynamics & controls and robotics.

Er. Udayvir Singh

Head-Department of Mechanical Engineering



◦ ❁ ❁ *New Joinings* ❁ ❁ ◦

Mohammad Mohasin has done his B.Tech. in **Mechanical Engineering** and obtained his M.Tech Degree in **Machine Design** as field of specialization from Aligarh Muslim University, Aligarh in 2011. He has more than 6 years of Industrial and Teaching experience. His teaching interests are primarily in machine design, finite element method, automobile engineering and CAD. He has served in Industry for 3.5 years as Mechanical Design/Application Engineer. His job profile involves Design conceptualization, 3D Modeling, Detailing, preparing Manufacturing drawings, creating the Dimensional Drawings, Main Assembly Drawing, Part Drawings and the complete Bill of Materials using Pro-E Tool.



WELCOME

◦ * ❁ *Departmental Activities* ❁ *

7 days value added program on “Robotics by NDM”
22 Sep. to 06 Oct. 2018

A 7 days value added program on “Robotics Workshop” is organized by Mechanical Engineering department to enhance the practical knowledge of the students. It is very important to partner with the right organization who can provide great content and engage students very well. In this workshop there is a collaboration with organization named as “My Engineering world” in the guidance of **Mr. Dheeraj Chauhan** who did work as trainer in this workshop.

Mr. Nitin Kumar Sahu (HOD ECE) is the convener and **Mr. Shahikant Singh** (ME) is the Faculty coordinator for the program who gave their huge contribution for making this workshop successful. In this interesting workshop the students get aware of LED Interfacing, LCD interfacing, different type of sensors interfacing, Fingerprint detection, RF-ID, basic concepts of Robotics, Robot designing etc.



BRINDAVAN AGRO INDUSTRIES
24 August 2018

Students of B.Tech (Mechanical Engineering), II & III year, have visited BRINDAVAN AGRO INDUSTRIES, Chhata, Mathura on 24 AUG, 2018, accompanied by Mr. Shashi Kant Singh and Mr. Satendra Kumar, Assistant Professors in the department.

These students have interacted with Industry Experts and discussed about the new era of the technologies used in the field of Soft drinks. The plant has two bottling lines - a sparkling PET line and a sparkling glass bottle line. Both the lines have the capacity to produce 600 bottles each per minute. Its Product Portfolio has an extensive range to choose from Sparkling Beverages, Still Beverages and Water. The industry used many equipments and machines like Water Filtration Equipment, Soft Drink Filling Machine, Carbonated Beverage Filling Machines, and Conveyor System.

This type of industrial visit enhances the knowledge of the students.



JINDAL SAW LIMITED
31 August 2018

Students of B.Tech (Mechanical Engineering), II & III year, have visited JINDAL SAW LIMITED, Kosi Kalan, Mathura on 31 AUG, 2018, accompanied by Mr. Shashi Kant Singh and Mr. Satendra Kumar, Assistant Professors in the department.

These students have interacted with JINDAL Experts and discussed about the new era of the technologies in the field of Pipes. Jindal Saw Ltd., (JSL) provides Total Pipe Solutions and is the leading manufacturer of Seamless Tubes and Pipes, Large Diameter submerged Arc Welded pipes, and Ductile Iron Pipes. JSL provides cutting of sheets for designing the pipes and testing of these pipes are also done in the plant. Jindal Saw Ltd., (JSL) encourage creative experimentation, embrace new ideas and institutionalize continuous improvement in all aspects of business and performance. JSAW offer an empowering work environment, a vibrant and winning approach, a system and processes orientation, performance focus, knowledge and capability drive.

This type of industrial visit enhances the knowledge and employability of the students by enriching their industry knowledge and to have the best industry interfacing.



* Students Achievements *

• **Aditya Jaiswal**, student of batch 2016-20, has been selected for development of prototype with supporting fund (12000+) under the theme "Mars Mission India", joint collaboration between Dr. APJ Abdul Kalam Centre (KC) and United Kingdom Centre for Astrobiology (UKCA). This was an golden opportunity for Aditya Jaiswal for presenting his excellent innovative ideas belonging to space and now the prototype will become the part of showcased in Kalam Library at University Campus, Lucknow and is very close to be part of MINAR (Mine Analogue Research) project event to be held at Whiby, Yorkshire organized by University of Edinburgh.

• **Prathmesh Pratik**, student of batch 2015-19, secured 3rd position in English debate in the event, Dr. Abdul Kalam Technical, Literary & Management Fest 2018 organized by AKTU at IET Lucknow.



* Departmental Topper's *

3rd Semester



Vishal Maurya
86.5%



Harsh Gupta
79.4%



Vivek Agnihotri
78.9%

5th Semester



Sahil Saxena
89.3%



Aakash Srivastava
87.4%



Hari Om
86.7%

7th Semester



Naman Gupta
81.9%



Saurabh Kumar
78.8%



Pradutta Kesharwani
78.2%



* *Recent Trends in Mechanical Engineering Field* *

- Industry 4.0 (Fourth Industrial revolution)
- 4D Printing Technology
- MEMS: Nanoelectromechanical systems
- Digital Twins
- Hyperloop Technology
- Air Brakes Systems
- 3D Metal Printing
- Computational Fluid Dynamics
- IIoT (Industrial Internet of Things)
- Beamed-energy Propulsion
- Autonomous Vehicle
- Scramjet (Supersonic Combustion Ramjet)
- Stir Friction Welding
- Biomimetics
- Agile Manufacturing
- Advances in HVAC
- Advances in Gas Turbine Technology



Message from Desk of Editor



Er. Shashi Kant Singh
Editor-in-Chief

We are glad to bring out the Issue 1 of Vol. 1 of our eNewsletter VIBRAZONE. Carrying forward our agenda of information clubbed with knowledge. This issue addresses new joining, faculty achievements, student achievements and recent technologies that came in existence.

I really thankful to our head of department.

VIBRAZONE is thankful to all who contributed to this issue. We are equally open to comments, criticism and suggestions to make it more informative.