## DEPARTMENT OF MECHANICAL ENGINEERING NEWS LETTER, Volume 2 Issue 1- Jul to Dec 2019



## DON BOSCO INSTITUTE OF TECHNOLOGY, MYSORE ROAD, BENGALURU - 560074

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#### **About department**

Mechanical Engineering is one of the most diverse and primitive branch of engineering. it remained always in demand and continue to be so in future. Hence it is evergreen branch. Mechanical Engineering finds application in all fields of technology, the need of mechanical engineers has increased exponentially over the decades. involves It design. manufacturing, maintenance of machines and mechanical systems. Besides Mechanical Engineering touches virtually every aspect of modern life and Mechanical Engineers has tremendous scope in automobile, Aerospace, Steel Industries. Power sector, Biotechnology, Manufacturing plants, petroleum, Marine Industry and Cement Industry etc. Opportunities exist worldwide for Mechanical Engineers and pay package is highly attractive.

#### Vision

The Department intends to be a centre of excellence through its competence in educating the aspirants in the various streams of Mechanical Engineering, to transform them into successful and socially responsible engineering professionals.

### **Mission**

- 1. To impart knowledge that builds strong foundations in basic principles and applications of engineering
- 2. To provide an environment for self-learning, add on courses, and hands-on training on advanced technologies to meet the global challenges.
- 3. To inculcate innovative thinking, team spirit, and leadership qualities.
- 4. To instill professional ethics with a strong concern for the environment and society



## **Semester Topper List**



4th Sem, Rachith Guru, 1DB17ME099, SGPA: 9.18



6th Sem, Raveendra J, 1DB16ME098, SGPA: 8.73

## **Department Forum**



The MESA (Mechanical Engineering Student Association) conducts technical talk, guest lecturer, quiz competition, Project exhibition, cultural activities and encouraging students to participate in different competitions to enrich the student academic and professional competitiveness.

### **EVENTS ORGANISED**

## Technical Talk



Technical Talk on HVAC industry Held on 18-09-2019

The resource persons briefed on opportunities available in HVAC industry in India and outside India and requirements of technical knowledge such as building services, design of air distribution system, ducting sizing, SLD and DLD preparation to enter HVAC industry.

## Awards



Prinst on Smart Engineers honoured Dr. Shivanna as best supporting HOD

## Industrial visit





## Industrial visit to Tayoda Gosei South India Pvt ltd held on 07-09-2019

This Industrial visit gives awareness to students about different manufacturing process involved in automobile parts manufacturing industry.

## Social Activities

Mechanical Engineering Students taken initiative to collect funds to North Karnataka Flood Relief.



Cash Contribution to NGO official





Distribution of T-SHIRTS for School Students





Contribution North Karnataka Flood Relief

### **Guest Lecture**





Guest Lecture on Non Destructive Testing held on 10-10-2019

The speaker emphasized on NDT test methods such as Liquid Penetrate test, Magnetic Particle test, Ultrasonic test, Radiographic test, interpretation of radiographs, qualities, duties, responsibilities, terminologies, welding procedures and opportunities available in India and abroad. From this Guest Lecture students gain the knowledge of different NDT tests and their importance in industries.



Technical Talk on Machine Learning and its Application held on 11-10-2019

The resource person briefed on opportunities available in Machine Learning and its application in India and abroad, requirements of technical knowledge such as importance of machine learning and impact of machine learning in industries.

## Technical Seminar





Technical Seminar on Industrial Automation on 12-09-2019

Students gain knowledge about Industrial Automation which includes the use of logical programming commands and mechanized equipment to replace the decision making and manual command-response activities of human beings.

## Technical Talk





Technical Talk on Dimensioning and (GD&T) on 21-09-2019

Geometric Tolerance

This Technical Talk gives a design approach and manufacturing mechanism that helps engineers and designers communicate how to bring a part design to life. and its applications in manufacturing industries.

## Industrial visit





Industrial visit to Bangalore Malleable Casting Pvt. ltd on 21-10-2019

In this Industrial visit students were exposed to real workstations, plants, machines and systems. The visit helps students to acquire knowledge of casting industry practices and also opportunity to have a face to face interaction with technical and administrative experts of the organization.

## Technical Talk





Technical Talk on Advanced Automobile on 18-09-2019

The Resource person briefed about the dark period and come back of EV, comparison between EV and other modes of transport based on energy sources, motor drive technologies and comparison of efficiency and losses of different EV motors, history of batteries, topologies of battery management system, future batteries, power-train technologies and its advancement and challenges faced by EVs.

# FDP, Conference, Seminar and workshop attended

1. Dr. K C Anantha Padmanabham has attended FDP on Outcome based eduaction held in DBIT, Bangalore, from 29th jukly to 2nd August.

- 2. Dr. Ranganath S R has attended FDP on Advancement in additive manufacturing held in CMRIT, Bangalore from July 1st to 14th 2019
- 3. Prof. Kishore N has attended FDP on Learn to Learn held in DBIT, Bangalore from Oct 10th 2019
- 4. Prof. Sriranga B K has attended FDP on Outcome based education & NBA accreditation held in ACS, Bangalore from July 1st to 14th 2019

## **Funds Granted**

- 1. The fund of amount Rs. 2,20,000/-sanctioned to conduct Workshop on Research Methodology and LATEX from VTU, Belagavi to Dr. Arun Magadum on 6/8/2019
- 2. The fund of amount Rs. 7000/- sanctioned from KSCST to carry out the final year B E project to Prof. S R Ranganath
- 3. The fund of amount Rs. 5000/- sanctioned from VTU to carry out the final year B E project to Prof. Saleem Khan.
- 3. The fund of amount Rs. 5000/- sanctioned from VTU to carry out the final year B E project to Dr. A M Nagarau.

## **Faculty Journal publication**

 K. C. Anantha padmanabham has published research paper titled "Microstructure studies and mechanical characterization of t6 heat treated aluminium and copper based alloy reinforced with zircon and graphite composite", in International Journal of

- Engineering Science and Technology, Vol. 14, No. 4 (2019) 2063 2073, August 2019.
- 2. Prof. Ranganath S R, has published research paper titled "Tensile Behavior of Aluminium2014 Reinforced with Boron Carbide and Copper Coated Short Basalt Fiber Based Hybrid Composites", International Journal Applied Mechanics and Materials, 1662-7482, Vol. 895, pp 187-193, 2019.
- 3. Prof. Sriranga B K , has published research paper titled "Effect of reduced grapheme oxide as Nanofluid on solar parabolicthrough collector receiver model", International ELSEVIER-Materials Today PROCEDIA, 2214-7853/\_ 2019 Elsevier Ltd, November 2019.
- 4. Prof. Sriranga B K has published research paper titled "Mechanical characterization of hybrid laminates composites on epoxy resin with natural jute fiber and S-glass fiber", in International Journal of Engineering applied Science and Technology, Vol. 4, Issue 7 Nov,2019.