# **VISION**

The Mechanical Engineering department strives to produce quality engineers to enable them pursue diverse careers with professional standards and ethical values



# **NEWSLETTER**

2015 - 2016

# MISSION

- To provide relevant and quality education to meet needs of industry and society.
- To equip with requisite set of skills and knowledge to succeed and thrive as engineers and leaders.
- To provide a continuous learning environment for promoting research activities
- To provide a competitive atmosphere to encourage innovative and original thinking.

# DEPARTMENT OF MECHANICALENGINEERING



**Editorial Board:** 

Principal:Dr.D.Hanumantha Rao

Faculty: Mr M V Kishore

Student: MrSai chandra

Head:Dr.D.Hanumantha Rao

Faculty: Mrs Poojitha

Student: Mrs Lasya priya

# **Faculty Corner**

#### **Faculty Publications**

- Mr. C. VENKATESHWAR REDDY Asst. professor ,presented a technical paper entitled 'Influence of Modified Epoxy Resin Systems on High Strength Carbon Roving Reinforced Composites IJAMMC ISSN:2277-3886(P),Vol 6, Issue 1, April 2016
- Mr. C. VENKATESHWAR REDDY Asst. professor ,presented a technical paper entitled " A Study on effect of filler (Sio2) on mechanical properties of Glass /epoxy (HT) Cure Composites" International journal of research in engineering technology (IJRET) e-ISSN 2319-1163, p-ISSN 2321-7308

### FDPs / STTPs / Workshops attended by the Faculty

- Mr. V Harinath Asst.Professor has attended -One week FDP on "Applications of CFD in Thermal-Fluids Engineering" at CMREC, Hyderabad conducted from 29.2.2016-6.3.2016
- Mr. A Kalayan Charan Asst.Professor has attended One week Refresher Course on "Engineering Mechanics" at MVREC, Hyderabad conducted from 18.06.2016- 24.06.2016

# **Events Organized**

- ✓ Department of Mechanical Engineering has organized a guest lecture on "Unsteady fluid flow in pipes "by Dr. C. V. Kameswara Rao, Professor, MVSR Engineering College, Nadergul, Hyderabad on 22<sup>nd</sup>March2016.
- ✓ Department of Mechanical Engineeering has organized a workshop on "FEA & CFD " from 17th-19thMarch 2016
- ✓ Department of Mechanical Engineeering has organized a workshop on "SAK Robotics " from 3-4<sup>th</sup> March 2016
- ✓ Department of Mechanical Engineering has organized a guest lecture on "Importance of simulation of processes in engineering design " with CAD-FEM Engineering Services Hyderabad on 20th Feb 2016

# **Events Organized in association with Professional Society's**

- ✓ Guest lecture on Analysis of Mechanisms by Prof. V. Nageswara Rao, OU, Hyderabad in association with SAE on 2<sup>nd</sup>April 2016
- ✓ One Day Workshop on MATLAB by Dr. G. Ravindranath, Professor, MECS, Hyderbad in association with ISTE on 19<sup>th</sup>March 2016

### **Faculty Achivements**

Mrs V Poojitha has registered Phd in JNTU Anantapur in Production on June 2016

# Students' corner:

#### State and National level participation

- M. Mahesh of 3ME has participated in 5 IN 1 Robot at IIT Madras on 12th March 2016
- H Sai Kumar, Sandeep Reddy V, Krishna Teja, Akhil Chintala, of 2ME has participated in Pragyan 2016, International Techno-Mangement Tiruchirappali, Tamil nadu from 25-28th Feb 2016

- K Srinath, Gnaneshwar, Mojammad Abdul Moiz, Abhiram D, Mahesh M, Himaja, Akshil sai, V Shivarama, Krishna Teja, Srivastav, Thrilochan, of 2ME,3ME, has participated in SAE Baja 2K16,Christ University Bangalore from 24TH-25TH JAN 2016
- ❖ Sai Ram of 1ME has participated in Lawrance Tech, Robofest 2016 college Vcc: AMBUSH ATOM, held at IIT Hyderabad on Feb 29th 2016
- Sai Ram of 1ME has participated in Ethical Hacking workshop at IIT Hyderabad held at IIT Hyderabad from 23rd-24th Jan 2016
- D.S.Sushma, Y.Prashanth, Yousha Ali, Nkhil M, Sai Ram, Md Salahuddin, Md Wasi Us-shan Jaleel, A Vineeth of 1ME has participated in IXION-Motor cycle Assembly & Disassembly Workshop, held at Ameerpet Hyderabad from FEB 27th-28th 2016

### Prizes/ Awards received by students

→ Abhishek of 1<sup>st</sup> Year Mechanical was awarded 1<sup>st</sup>prize in "Elocution" held at MIDHANI, Hyderabad on Feb 2016.

#### Student Articles

**Art of Giving, a way of life** - "Be the change that you wish to see in the world." — Mahatma Gandhi. Our nation has rich history and culture which inspires us every day. It is a responsibility taken with pride to serve the nation for the welfare of the society, nation intern for its development. we are capable enough



to help the one in need. Contributing through education is one of the noblest means to give to the society. Taking that into account we, the student members of Youth for Seva –MECS, voluntarily taken part in educating the one in need. Youth for Seva is an NGO, a platform where through many activities we experience the joy of giving. One such social service which we consider as one of our achievements is NMMS –National Means Cum Merit Scholarship, is a test conducted by MHRD, for 8th class Govt. School children. If the students qualify the test they will avail a scholarship of Rs.12000/- per year for their next four academic years (i.e. 9th to 12th). The syllabus involving Aptitude and Reasoning which the

students are not aware of, we trained the students by teaching at Govt. Schools in our free time for a period of 3 months and equipped them to attempt the exam confidently. This scholarship which will help the economically backward students financially to further continue their studies. We have trained more than 70 students in past two years to achieve their goal. This particular service helped us to learn leadership qualities, communication skills and soft skills, Time Management, etc. and also understand the role of a teacher in a student's life.

Y Prashanth, BE 1/4 Mechanical Engineering

#### VEHICULAR SAFETY MANAGEMENT SYSTEM

The vehicle safety is the main issue today. Public vehicle are destroyed by many reasons like fire in vehicle, internal problems. The VSMS system is more useful for Public transport, it includes the Fire management system, Vehicle health system.

#### FIRE CONTROL SYSTEM (FCS)

Due to fire many public vehicles are destroyed, to control the fire in vehicle, we need to find the fire location and control the fire with help of automatic control for fire sensing and respond it to the controller.

#### **HOW IT WORKS**

In the event of a very high speed, high-energy rear impact, a system of crash sensors and high speed electronic processors determines that the system needs to deploy. The system delays deployment until the ABS wheel sensors indicate the wheels have slowed and the vehicle is coming to rest.

If the vehicle speed sensors have been damaged in the accident then they are unable to command deployment, a back-up timer will deploy the system six seconds after impact. The fire suppression materials are stored in an unpressurized liquid state. When the deploy signal is given, two gas generators, similar to the gas generators used in airbags, generate high pressure gas. Suppressant and surfactant materials are then emitted through a system of manifolds and nozzles to suppress the fire. Surfactant reduces the surface tension of the liquid fire suppressant enabling the liquid to spread more quickly and completely.

When the fire is occurring the Alert massage in generate with help of GSM to control room.

#### **VEHICLE HEALTH SYSTEM**

Public vehicles are continuously running on road for many hours. Once they break down, it takes substantial cost to repair them. Besides, since repairing vehicles takes much time, it significantly affects the activity rate. Therefore, public vehicle, especially large ones, are required to be free of down time and capable of planned operations without interruption. In order to secure such machines, it is necessary to early detect any symptoms of vehicular trouble by physical examination, etc. and have the maintenance personnel take suitable measures without delay. Transmission and rotors to detect developing problems.

The method that has been recommended most is to carry out prescribed periodical inspection and repair in a prescribed way. However, if some vehicle trouble occurred, there was no alternative but to rely on the experience of skilled instruments. Several attempts have been made to have the vehicle collect data and diagnose trouble for itself. However, it was impossible to detect symptoms of vehicle trouble beforehand and take suitable preventive measures

Phani, BE 1/4 Mech.Engg

#### **Toppers List**

- ❖ Y. Prashanth of II Year is awarded Gold medal for academics in I Year.
- G. Sai Kiran Srivastav of III Year is awarded Gold medal for academics in II Year
- Sai Chandra of IV Year is awarded Gold medal for academics in III Year
- A. Aashna Joshi passed out student is awarded Gold medal for academics in IV Year

#### **Placement**

- ✓ A Srinivas Yadav, Bajjuri Nikhitha, Srushanth Singh , M.Sowjanya , M Sushmitha, Nayeemoddin, B Anisha has placed in Varistha Infracon
- ✓ Sai Vamsi Behara, M.Sowjanya, Manikanta, Vamshi Krishna. K, has placed in Genpact
- ✓ Ajay Bhagavatam, Prasanna Kumar, S. Hariprasad has placed in Amazon
- ✓ A Sruthi has placed in Wipro