

VISION

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

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.

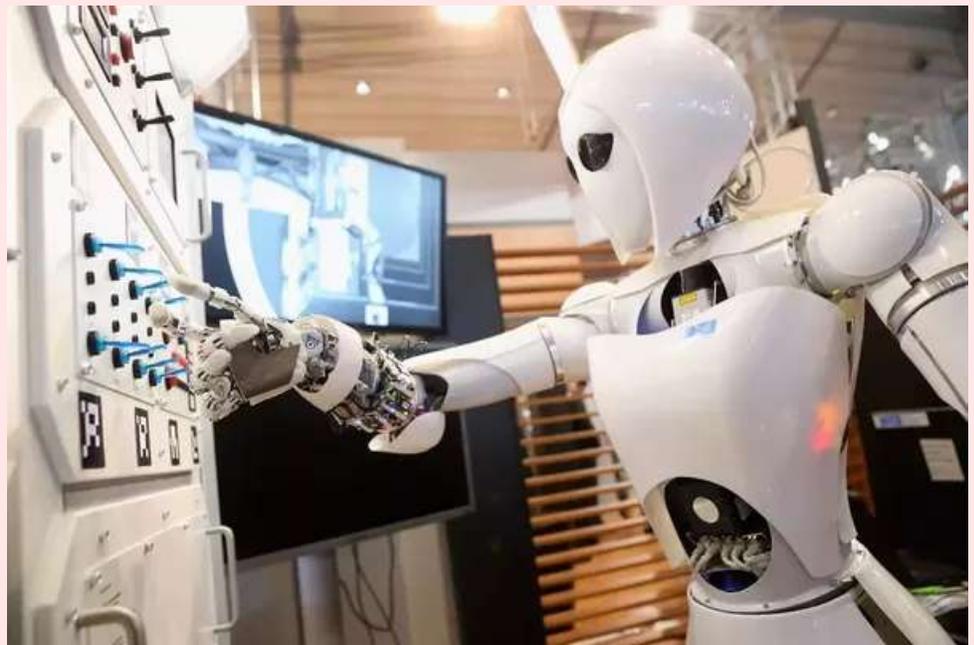
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NEWS LETTER

2016 - 2017

DEPARTMENT OF MECHANICAL ENGINEERING



Editorial Board:

Principal: Dr.D.Hanumantha Rao

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Head: Dr.D.Hanumantha Rao

Faculty: Mrs Poojitha

Student: Mrs C. Manaswini

Faculty Corner

Faculty Publications

- ❖ Dr. D. Hanumantha Rao has published a paper on An experimental study on the wear behaviour of thixoformed components in aluminium alloys in IJSIET ISBN : 978-81-904760-9-6, May-17
- ❖ Mr M V Kishore has published a paper on An experimental study on the wear behaviour of thixoformed components in aluminium alloys in IJSIET ISBN : 978-81-904760-9-6, May-17
- ❖ Mr. M. Krishna has published a paper on Availability and Maintainability of Buses – A Case Study at TSRTC in International Conference on Emerging Technological Innovations in Mech. Engineering May 2017
- ❖ Mr. M. Krishna has published a paper on Performance monitoring & evaluation of group of buses using NHPP model - a case study at TSRTC in IJSIET May 2017 (Vol-IV)
- ❖ Mr. C. Venkateshwar Reddy has presented a paper on Mechanical Characterization of Unidirectional Carbon and Glass/Epoxy Reinforced Composites for High Strength Applications in Science Direct Elsevier 4 (2017) 3166-3172
- ❖ Mr. C. Venkateshwar Reddy published a paper on Experimental Investigation of Hot Machining of Metals by Using Oxy-Acetylene Flame in IJSIET ISBN:978-81-904760-9-6, Vol 4, Issue May 17

FDPs / STTPs / Workshops attended by the Faculty

- ❖ Mr.M.V.Kishore Assistant Professor Attended a two day workshop on Introduction to ANSYS Mechanical at MECS, HYD from 24.03.2017 -25.03.2017
- ❖ Dr J Hussain Assistant Professor Attended a two day workshop on Introduction to ANSYS Mechanical at MECS, HYD from 24.03.2017 -25.03.2017
- ❖ Mr.C Venkateshwara Reddy Assistant Professor attended a two day workshop on Introduction to ANSYS Mechanical at MECS, HYD from 24.03.2017 -25.03.2017
- ❖ Mr.M.Krishna Assistant Professor attended a two day workshop on Introduction to ANSYS Mechanical at MECS, HYD from 24.03.2017 -25.03.2017
- ❖ Mr.V Harinath Assistant Professor
 - Attended a two day workshop on Introduction to ANSYS Mechanical at MECS, HYD from 24/3 to 25/3/17.
 - Five day FDP Course on Entrepreneurship Educators Program at MLRIT from 20.06.2017- 24.06.2017
- ❖ Mr.T Somashekar Assistant Professor attended a two day workshop on Introduction to ANSYS Mechanical at MECS, HYD from 24.03.2017 -25.03.2017
- ❖ Mr.Naveen Kishore Assistant Professor a two day National Workshop On Non Destructive Testing at UCE, OU Hyderabad from 18.01.2017- 19.01.2017
- ❖ Mrs V Poojitha Assistant Professor attended a two day workshop on Introduction to ANSYS Mechanical at MECS, HYD from 24.03.2017 -25.03.2017
- ❖ Mr. A Kalyan Charan Assistant Professor a three day workshop on “Analytical Approach on Mechanical Design” at GCET, HYD from 16.03.2017- 18.03.2017
- ❖ Mr. M. Aditya Seshu Assistant Professor attended a two day workshop on Introduction to ANSYS Mechanical at MECS, HYD from 24.03.2017 -25.03.2017
- ❖ Mr.Sampath Siddam Assistant Professor attended a two day workshop on Introduction to ANSYS Mechanical at MECS, HYD from 24.03.2017 -25.03.2017

Events Organized

- ✓ Two Day workshop conducted on “ANSYS CSR Initiative for Engineering Critical Thinking Skills “jointly organized by CAD/FEM TECH and Dept of mechanical engineering college from 23rd to 24th March 2017
- ✓ SADHYA 2K16 techfest organized by Department of Mechanical Engineering on 31st March 2017

Events Organized in association with SAE, ISTE

- ✓ 1 Day workshop on MATLAB by Dr. A. Rabindranath, Professor, MECS, Hyd in association with ISTE on 9th March 2017
- ✓ 1 Day national workshop on 3D Printing Technology by Mechanical Department in association with Indian science congress on 13th April 2017
- ✓ 1 day seminar on gender sensitization by Mr. Prashanth kuberkar, MECS, Hyd in association with ISTE

on 6th April 2017

- ✓ Guest lecture on analysis of mechanisms by Professor V Nageshwar Rao, OU Hyderabad in association with SAE on 9th-10th March 2017

Students' corner:

State and National level Participations

- ❖ Y.Prashanth, C.Bharath Chandra, Chaitanya, Hima Bindhu, S.Sai krishna, Nikhil Maddargi, Krishna Teja, Md Salahuddin, S Harish, A Vineeth, has participated in in Auto- quiz &CAD during "Auto Cognizance" at MVSR Engg college from 9-10TH FEB 2017S Sai Krishna,pruthviraj of 3rd yr ME has participated in in SAE Tier 2 events, in (work holding) scheduled on 30.12.2017 at CMR, Hydrebad
- ❖ H Sai kumar, Chaitanya has participated in (CADFEM),Ansys,CSR Initiate at Banglore from 24-25th March 2017
- ❖ S K Dilshad, S. Sai krishna, Shivaram has participated in SAE Tier 3 (Work holding) events held at Konugu, Tamilnadu 25th-26th Feb 2017
- ❖ S K Dilshad, S. Sai krishna, Shivaram has participated in SAE Tier 3 (Additive Manufacturing) events held at Konugu, Tamilnadu 25th-26th Feb 2017

Prizes/ Awards received by students

- ✚ C.Manaswini, Abhishek Ranga, has awarded 1st prize in Quizzotic 2k17-a national level techno-general quiz held at Eruditesquizzing Club,OU Hyderabad on 27th March 2017 S.Sai Krishna, V.Prudhvy raj, S.Radhe shyam, Phani Kumar of 2,ME, 3ME has won 2nd Prize in SAE Tier 2 events in (Process planning) organized at CMR, Hyderabad from December 30th 2017
- ✚ S.Sai Krishna has awarded 2nd prize in CONNAISSANCE 2K17 (Machining) heald at JNTUH Hyderabad on 21st-22nd March 2017
- ✚ S.Sai Krishna, Shivaram, Dilshad, has awarded 4th prize in SAE Tier 3 (work holding) held at Kongu Engineering College,Perundurai, Tamilnadu from 25th-26th Feb 2017

Student Articles

Energy Storing Mechanisms

With fossil fuels being consumed at an ever increasing pace, the world is very soon bound to run out of fuel unless we shift towards alternatives. Solar energy has a great scope. Today, India has an installed capacity of 26 GW of Solar Energy and has put an aim to reach 100 GW by 2022. Although it is a great alternative source, there's a major backdrop. It won't work at nights. Wind Energy can't be relied on because the quality of winds can't be assured. If one has to supply energy continuously and uninterruptedly, we need to store energy when in surplus, for times when in demand. A battery might store electrical energy for small quantities of energy but when the numbers are in MW and GW, it is a whole new story.

Pumped Storage Hydroelectricity is the method which stores energy in the form of gravitational potential energy of water, pumped from a lower elevation reservoir to a higher elevation. The energy required for pumping is the surplus energy obtained from Wind or Solar. The beauty of this method is that no additional large installations are required. The turbine which generates electricity while water is running down can itself be used pump the water back to the higher reservoir. The overall efficiency of a round trip is about 80%. The only requirement is for the availability of large quantities of water in the lower reservoir. At the time of requirement, a hydroelectric turbine can be brought to 100% of its capacity (about 2 to 50 MW) in just 120 seconds from rest and synced to the main grid. The whole process can also be automated to the single push of a button. India has an installed capacity of 7 GW of PSH.

Another method is the Flywheel Energy Storage technique. A heavy flywheel is accelerated to rotate at high speeds of 1,00,000 rpm. About 1-2 MJ of energy can be stored in such a flywheel. And at the time of requirement, capacities at 100 KWh can be obtained from it. A great advantage of FES is the number of full-cycle lifetimes that it can provide. It can run for decades or 10⁷ full-cycles without any maintenance. The limits of speeds to reach are based on the strength of the materials used and the stresses built in them. Newer materials are being discovered for this purpose. More methods like Compressed air energy storage,

hydraulic accumulators, thermal energy storages are also available. More research is going on in the field of Unconventional Energy resources and energy storage techniques in Mechanical Engineering. In the end, it is all focussed towards a green Earth. Happy Engineering. **Surya Datta Sudhakar, BE 1/4 Mech.Engg**

SOPHIA, THE WORLD'S FIRST ROBOT CITIZEN

On October 25, 2017, Sophia, a delicate looking woman with doe-brown eyes and long fluttery eye-lashes made international headlines. She'd just become a full citizen of Saudi Arabia -- the first robot in the world to achieve such a status. Sophia is Hanson Robotics' latest and most advanced robot to date and a cultural icon. Sophia is an evolving genius machine. Her incredible human likeness, expressiveness, and remarkable story as an awakening robot over time make her a fascinating front-page technology story. Sophia's creator, Dr. David Hanson, is the founder of Hanson Robotics and a modern-day renaissance man who has built a worldwide reputation for creating robots that look and act amazingly human. After working at Disney, Dr. Hanson aspired to create genius machines that will surpass human intelligence.. As an extension of human intelligence, Hanson Robotics genius machines can evolve to solve world problems too complex for humans to solve themselves. **Y Prashanth BE 2/4 Mech.Engg**

Toppers List

- ❖ Surya Dutta Sudhakar of II Year is awarded Gold medal for academics in I Year.
- ❖ Y. Prashanth of III Year is awarded Gold medal for academics in II Year.
- ❖ G. Sai Kiran Srivastav of IV Year is awarded Gold medal for academics in III Year
- ❖ K.Srinath graduated from MECS, is awarded Gold medal for academics in IV Year

Guest Lectures/FDPS

Entrepreneurs Development Programme

Entrepreneurs are the engines of economic growth. They bring enormous positive contributions to a country's economic growth and social development. Entrepreneurs play the role of innovators who can fully explore the complete potentialities of the country's available resources of labor, technology and capital. Today's entrepreneurship is regarded as one of the best economic development strategies to develop country's economic growth and sustain the country's competitiveness in facing the increasing trends of globalization. Some of the best known companies today are manifestation of youth power. Much more can be accomplished by understanding various factors influencing youth power. Further if an attempt is made to develop these systematically through education, family values & organizational culture etc many such innovations would flourish. Having understood the need for training in entrepreneurship Matrusri Engineering College is conducting a full length program on entrepreneurship for students in association with wadwani foundation.



Students' Placements

Mechanical Branch Selects (2013-2017) Batch

- ✓ Gangu vaishnavi, Kurnool srinath, Sriram praneeth V, G Shashank has placed in Tech Mahindra
- ✓ G. Harshit kumar Srivastava, Sriram praneeth V, G Prashanth, Abdul Kareem, has placed in Tech Amazon
- ✓ N. Laasya priya, Ramya Reddy, Himaja ryali, Ankitha chiluka, has placed in Genpact