

VISION

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

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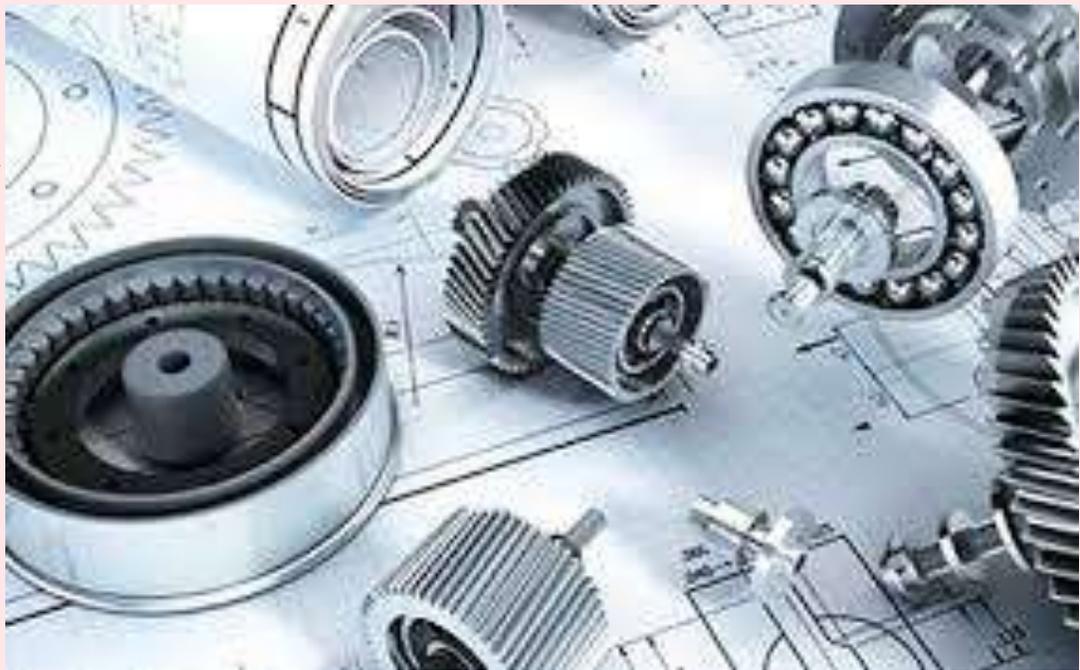
NEWS LETTER

2017 - 2018

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 MECHANICAL ENGINEERING



Editorial Board:

Principal: Dr.D.Hanumantha Rao

Faculty: Mr M V Kishore

Mr Sampath Siddam

Student: Mr Abhishek

Head: Dr.D.Hanumantha Rao

Faculty: Mr Sampath Siddam

Student: Mrs Manaswini

Faculty Corner:

Faculty Publications

- ✦ Dr. D Hanumantha Rao, Professor, Published a Technical paper entitled An Experimental Study on the Mechanical Properties of Thixoformed Components in Aluminum Alloys 'International Journal of Creative Research Thoughts, Feb 2018, Hyderabad.
- ✦ Dr. D Hanumantha Rao, Professor, Published a Technical paper entitled 'Identification of Process Parameters in Thixoforming Process Using Fuzzy logic Approach' National Conference on Recent Trends in Mechanical Engineering, NCRTE - 2018, JNTUH, Feb 2018.
- ✦ Dr. MV Kishore, Associate Prof ,Published a Technical paper entitled An Experimental Study On The Mechanical Properties Of Thixoformed Components In Aluminum Alloys 'International Journal of Creative Research Thoughts, Feb 2018, Hyderabad
- ✦ Dr. MV Kishore, Associate Prof ,Published a Technical paper entitled 'Identification Of Process Parameters In Thixoforming Process Using Fuzzy logic Approach' National Conference on Recent Trends in Mechanical Engineering, NCRTE - 2018, JNTUH, Feb 2018.
- ✦ Mr.C.Venkateswar reddy Asst Prof published a paper in Journal of Engg. Technologies and Innovate research(JETIR) (ISSN-2349-5162) , Volume-5,Issue 6 ,June 2018.Structural Design & analysis of composite rocket motor casing (CRMC) for High strength applications
- ✦ Mr.C.Venkateswar reddy Asst Prof Published a paper in International journal of Engineering research and applications (IJERA) ISSN: 2248-9622, Volume-8 Issu-7(part-III) july -2018,"Mechanical Characterization carbon /epoxy Uni-directional and Bio-directional composites for structural applications
- ✦ Mr.C.Venkateswar Reddy, Assistant Professor Published a Technical paper entitled Experimental Characterization of Inconel-718 by GTAW Process Using Different Shielding Gases, on NSET February 2018 held at Matrusri engineering college Saidabad, Hyderabad.
- ✦ Mr.M.Krishna, Assistant Professor presented a technical paper entitled Trend Analysis-A Tool To Identify The Failure & Run Mode In Public Transport Buses on on NSET February 2018 held at Matrusri engineering college Saidabad ,Hyderabad.
- ✦ Mr.M.Krishna Assistant Professor has published a paper on Reliability Analysis of Group of Buses – A Case Study at TSRTC National Conference on Innovations and Developments in Mechanical Engineering MAR 2018
- ✦ Mr.M.Krishna Assistant Professor has published a paper on Failure Criticality Analysis using FishiKawa Diagram International Journal for Creative Research Thoughts FEB 2018
- ✦ Mr.V.Harinath, Assistant Professor presented a technical paper entitled “Factors And Mechanisms Responsible For Heat Transfer Enhancement Using Nano Fluid, on NSET February 2018 held at Matrusri engineering college Saidabad ,Hyderabad.
- ✦ Mr.V.Harinath Assistant Professor has published a paper on Extraction of liquid hydrocarbon fuel from waste plastic International Journal for Creative Research Thoughts ISSN: 2320-2882Pp:202-207
- ✦ Mr. P.Naveen Kishore Assistant Professor presented a technical paper entitled “Review Paper on Friction Stir Welding of various Materials and aluminium matrix composites”, on NSET February 2018 held at Matrusri engineering college Saidabad ,Hyderabad.
- ✦ Mr.P.NaveenKishore Assistant Professor has published a Paper on Thermo acoustic refrigeration in International Journal of Scientific Research e-ISSN: 2278-1684,p-ISSN: 2320-334X PP. 58-63
- ✦ Mr. T Somashekar, Assistant Professor presented a technical paper entitled “Review Paper on Friction Stir Welding of various Materials and aluminium matrix composites”, on NSET February 2018 held at Matrusri engineering college Saidabad ,Hyderabad.
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- ✦ Ms. V. Poojitha, Assistant Professor presented a technical paper entitled “Severe Plastic Deformation And Its Methods”, on NSET February 2018 held at Matrusri engineering college Saidabad ,Hyderabad.

- ✦ Mr. A.Kalyan Charan, Assistant Professor presented a technical paper entitled “Thermal Analysis On Rectangular Plate Fin With Perforations Using ANSYS ”, on NSET February 2018 held at Matrusri engineering college Saidabad ,Hyderabad.
- ✦ Mr.Sampath Siddam, Assistant Professor presented a technical paper entitled “Design And Analysis Of Thermo Mechanical Loading For A Turbine Housing Using FEA”, on NSET February 2018 held at Matrusri engineering college Saidabad ,Hyderabad.
- ✦ Mr. Aditya Machiraju, Assistant Professor presented a technical paper entitled “Extraction Of Liquid Hydrocarbon Fuel From Waste Plastic”, on NSET. February 2018 held at Matrusri engineering college Saidabad, Hyderabad
- ✦ Mr.P.Nitish Kumar Assistant Professor published a Review paper on processing of metal matrix composites & its properties. International Journal for Creative Research Thoughts ISSN: 2320-2882Pp: 284-287

FDPs / STTPs / Workshops attended by the Faculty

- ❖ Dr.M.V.Kishore Associate professor
 - Attended National Conference on recent trends in Mechanical Engineering at JNTUH
 - Presented a paper in National conference on NSET held at Matrusri engineering college Saidabad, Hyderabad, on Experimental study on the Mechanical Properties of Thoxoformed components in Alumilium alloys.
- ❖ Mr.C. Venkateswar Reddy Assistant Professor
 - Presented a paper in International conference on intelligent manufacturing and Automation (ICIMA-2018) during the 20 & 21 july at Dept of Mech.Engg & Prod.Engg DJSEC Mumbai.”Effects on Benzoxine on Epoxy based carbon fabric reinforced composites for high strength applications.
 - Presented a paper in National conference on NSET held at Matrusri Engineering college Saidabad, Hyderabad, on Experimental Characterization of Inconel-718 by GTAW Process Using Different Shielding Gases.
- ❖ Mr.M.Krishna Assistant Professor
 - Attended National Conference on recent trends in Mechanical Engg at JNTUH
 - Attended National Conference on Innovations & Developments in Mech Engineering at AGI,HYD
 - Presented a paper in National conference on NSET held at Matrusri Engineering college Saidabad, Hyderabad, Trend Analysis-A Tool to Identify the Failure & Run Mode in Public Transport Buses.
- ❖ Mr.V Harinath Assistant Professor
 - Presented a paper in National conference on NSET held at Matrusri Engineering college Saidabad ,Hyderabad, on “Factors And Mechanisms Responsible For Heat Transfer Enhancement Using Nano Fluid
 - Participated in Reasearch Methodology held at JNTUH 16th Feb to 21st Feb 2018.
- ❖ Mr.T.Somasekhar Assistant Professor
 - ✓ Attended one day workshop Beyond Syllabi at MECS Engineering College Saidabad.
 - ✓ Presented a paper in National conference on NSET held at Matrusri Engineering college Saidabad, Hyderabad, on Experimental Characterization of Inconel-718 by GTAW Process Using Different Shielding Gases.
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- ❖ Mr.A.Kalyan Charan Assistant Professor
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- ❖ Mr.Aditya Seshu Assistant Professor
 - ✓ Attended one day workshop Beyond Syllabi at MECS Engineering College Saidabad
 - ✓ Presented a paper in National conference on NSET held at Matrusri Engineering college Saidabad ,Hyderabad, on “Extraction Of Liquid Hydrocarbon Fuel From Waste Plastic”
- ❖ Mr.P.Nitesh kumar Assistant Professor
 - ✓ Attended one day workshop Beyond Syllabi at MECS Engineering College Saidabad
- ❖ Mr.K.V.Sai Pavan Assistant Professor
 - Attended one day workshop Beyond Syllabi at MECS Engineering College Saidabad

Events Organized

- ✓ Symposium Guest lecture on Entrepreneurship, by Mr.J.Rajeswar Reddy, GM DIC ,RR Dist on 4TH April 2018 at MECS Engineering College
- ✓ A guest lecture by Dr. S. Gopinath- Outstanding Scientist-H “Aerospace Vehicle Integration and Testing” on 15th March 2018 at MECS Engineering College

Events Organized in association with Professonal Society’s

- A guest lecture by Dr. G. Ravindranath Professor, MECS, Hyd -H “MAT LAB” in association with ISTE on 17th Feb 2018 at MECS Engineering College

Faculty Achievements

- ✓ Dr M V Kishore Associate Prof Mechanical Department has submitted his thesis and awarded PhD on “Effect of Process Parameters on The Mechanical Properties of Aluminum Alloy in Thixoforming Process – An Experimental Study” April 2018 from JNTU, Hyderabad.
- ✓ Mr A Kalyan Charan Asst Prof pursuing PhD in JNTUH, has completed pre-PhD in March 2018

Students’ corner:

Internships By Students

- Manufacturing Of Steam Turbines by Mahipal .S,S. Sai Krishna, G.Srikanthof 3 ME at BHEL, Hyderabad from 27thJune 2017to 11th July 2017
- "Identification of appropriate resonance region for envelop analysis in rolling element bearings " byAnandini Sravya at IIT Madras from 26t June 2017 to 28th July 2017

State and National level Participations

- ❖ S Mahipal of 3ME has participated in SAE Tier 3 events, in (Engineering problem solving, Engineering Drawing, Engineering Design, Design of Assembly) scheduled from 30.03.2018 to 31.03.2018 at MLRIT, Hyd..
- ❖ M Nikhil of 3ME has participated in SAE Tier 3 events, in (Light weight mobility, Onboard diagnosis, Reverse engineering,) scheduled from 30.03.2018 to 31.03.2018 at MLRIT, Hyd..
- ❖ Surya Datta, Pruthviraj of 3ME has participated in QUIZZOTIC V8.0 National Level Techno-general Quiz scheduled on 24.03.2018 at O.U, Hyderabad .
- ❖ K. Bhargava, G.Harsha, G.Prem, A.Sakshith of 1ME has participated in IB Hubs 2day workshop with IIT kharagpur scheduled from 20-21st March 2018 at MRCET, Hyderabad
- ❖ S Mahipal of 3ME has participated in MECHARENA 2K18 scheduled from 9th-10th March 2018, at O.U, Hyd..
- ❖ S Mahipal, Sai kumar of 3ME has participated in Bridge Biulder , scheduled from Feb 9-11th 2018, at IIT, Hyd.
- ❖ Sai Krishna, Sai kumar of 3ME has participated in CAD-Pro , scheduled from Feb 9-11th 2018, at IIT, Hyd.
- ❖ S Mahipal of 3ME has participated in Two Day National workshop on CAD , scheduled from 20-21st Jan 2018, at Methodist College, Hyd
- ❖ A group of 11 students has participated in Go-Kart Design, scheduled from 18th-19th Feb 2018, at S.R.K.R college, Bhimavaram, Andhra Pradesh

Prizes/ Awards received by students

About 13 students have secured I and II positions in various extracurricular events conducted by reputed institutes and Universities in the state.

- ✦ S.Sai Krishna, V.Prudhvy raj , S.Radheshyam , Phani Kumar of 2ME,3ME has won 1st Prize in SAE Tier 3 events in (process planning) organized at MLRIT, Hyderabad from 30-31st March 2018.
- ✦ Surya Chaitanya, Nikhil kumar of 3ME has won 1st Prize in SAE Tier 3 events in (On-board diagnosis) organized at MLRIT, Hyderabad from 30-31st March 2018.
- ✦ Surya Chaitanya, Nikhil kumar, Bharath Chandra of 3ME has won 3rd Prize in SAE Tier 3 events in (Jet Design) organized at MLRIT, Hyderabad from 30-31st March 2018
- ✦ S.Sai Krishna, of 3ME has won 1st Prize in CONNAISSANCE 2K17 (Machining) organized at JNTUH, Hyderabad from 14-15th March 2018
- ✦ S Mahipal, Sai kumar of 3ME has won 1st prize in Elan vision national level techfest, organized at JNTUH, Hyderabad from 9-11th Feb 2018

Toppers in II, III and IV year of BE- ME

- ❖ M. Abhiram of II Year is awarded Gold medal for academics in Ist Year.
- ❖ Surya Dutta Sudhakar of III Year is awarded Gold medal for academics in II Year.
- ❖ Y. Prashanth of IV Year is awarded Gold medal for academics in III Year.
- ❖ Y. Nikitha graduated from MECS, is awarded Gold medal for academics in IV Year

Student Articles

National Science Day:

Manaswini

Mech-3/4-023

Breaking away from the routine and monotonous schedule of College hours, the students of MECS planned a day long celebrations of the National Science day on the 28th of February. We all being students of science

and technology Feb 28th has a distinct importance. It is the day when the great Scientist Chandrashekar Venkat Raman first proposed the Raman Effect for which he was awarded the Noble Prize.

In a first of its kind in our college the following events were conducted:

1. Quiz- Science and technology in India.

A team of two were allowed to participate and a staggering 94 teams participated from all departments which was won by SD Sudhakar of Mech 2/4 and. The Quiz comprised of three rounds in total. The first round was written round followed by an Audio Visual Round and the last was a Buzzer round.

2. Elocution- Advancement and Evolution of Science and Technology in India- From Aryabhata to ISRO.

3. Essay Writing- Science and Technology for Sustainable Development.

4. Poster Presentation- Related to Science and Technological Advancements.

The day concluded with a talk on 'The Scientific Temperament of the Indian Mind' by Shri Ayush Nadimpally, CEO, Adriotech Engineering Solutions Pvt. Ltd.

The prizes for the Winners and the Runners were distributed jointly by the Principal and the Chief Guest.

INDUSTRY VISIT

-Abhishek Ranga

Mech-3/4-020

“Where we go decides who we become”

On a warm, idyllic Sunday evening, the 18th of February, the students of Mechanical Department Matrusri Engineering College started off from the college campus to what promised to be an exciting visit to the cradle of India's space program-The Satish Dhawan Space Centre also called as SHAAR-Sriharikota High Altitude Range. Located off a remote island of Sri Hari Kota in Nellore.

A batch of 48 students accompanied by three faculty members went on to this Industrial Visit. In the early morning of 19th we reached Sullurpet located about 30 Kms. off the coast of India's eastern shores. After checking into the hotel and breakfast, the batch started off to the Industrial Visit to Satish Dhawan Space Centre. There was palpable excitement as we neared the main gates of SDSC. After thorough security checks we were escorted into the auditorium and were shown an AV which gave us bird's eye view of Satish Dhawan Space Centre in particular and ISRO in general.

ISRO is the primary space agency of India and one of the largest space research organizations in the world. Its primary objective is to advance space technology not only for the national benefit but also the larger human good. From the auditorium we were guided to the hallowed MCC (Mission Control Centre) which is the main center that monitors the flight parameters and the general health of the satellite after it is launched. This historical place was visited by many Prime Ministers' who were witness to many successful launches at SHAR.

The much anticipated part was our visit to the Launch pad which just lay across the shore of Bay of Bengal. The sheer magnitude of the technology involved and the antecedents of many successful launches from the very same place made all of us very inspired.

Last but not the least we visited the Space Museum which helped us to gain an insight into the history of Space Science evolved and also the history of ISRO. After lunch we started our journey back to Hyderabad.

On our way back we were thrilled to visit the beach at Nellore though for a very brief time.

The visit not only provided a good insight into the quality of research happening in the area of space technology but also gave great exposure to the students about the future career prospects and area's of research in applied sciences.

Guest Lectures

GUEST LECTURE-

A guest lecture by Dr. S. Gopinath- Outstanding Scientist-H.

Shri Gopinath is the Project director of Directorate of System Integration, RCI (Research Centre Imarat) was organized for the students of Mechanical Engineering 2nd and 3rd years students on the topic "Aerospace Vehicle Integration and Testing" on 15th March 2018. Shri Gopinath is the proud alumni of the very 1st batch of Matrusri Engineering College and a proud recipient of many prestigious awards.

Dr. Gopinath spoke extensively about the Inertial Measurement Units, gyroscopes, accelerators, jigs fixtures- their make and design, material selection so on. Shri Gopinath's lecture not only focused on the technical aspects of the various technological aspects involved in the Missile making industry but also emphasized on the day to day challenges they face. He stressed on the need for the younger generation to be confident and self-reliant to be able to stand on independently.



GUEST LECTURE-

Guest lecture on Entrepreneurship, by **Mr.J.Rajeswar Reddy, GM DIC ,RR Dist** on 4TH April 2018. He enlightened the students on various topics like meaning of entrepreneurship, need for an entrepreneur, qualities of an entrepreneur, Steps to start an industry and initiatives taken up by Telangana govt like TS-iPass , T-Pride etc. He also encouraged students to visit various institutes like CITD,CIPET,IICT,NIFT,FDDI, Indian Institute of packing, NIN etc for project internships ,latest technological developments ,project ideas and for funding. At the conclusion winners and runners of Spark E-cell student competition were presented with Gifts .



Industrial Visit

TO ISRO An industrial visit to SDSC-SHAR (ISRO), Sriharikota has been organized by Department of Mechanical Engineering for B.E III/IV students on 19th February, 2018 who were accompanied by faculty members. ISRO is the primary space agency of India and one of the largest space research organizations in the world. The objective of the visit was to provide a Technical Exposure to the students about Space Technology and advancements in Technology. The visit not only provided a good insight into the quality of research happening in the area of space technology but also gave great exposure to the students about the future career prospects and areas of research in applied sciences.



TO BHEL To be taught, learn and understand machines in every way, this is the motto of every budding mechanical engineering. Industrial visits and tours are one of the best ways to create a hands-on experience and a awareness. BHEL, Bharath Heavy Electricals Limited is one of the biggest manufacturing companies funded by the government. Initially developed and constructed



under the guidance of our late Prime Minister, Pandit Jawaharlal Nehru.

The industrial tour to BHEL, Hyderabad was educational and interesting. At 11.15A (12/04/2018) in the morning, the tour was started. After getting the initial and much needed sustenance from the BHEL canteen, the tour was begun. Fabrication Shop was the first shop. From different types of welding machines like Plasma Arc Welding to various lathe machines, principles and workings were explained explicitly. Very long tubes were being manually inserted in a heat exchanger with great care and precision. Oil Rigs and Pulverizers, was a wonderful shop. From different boilers, preheaters and the huge 500 ton designs of the burning casting were all shown

Students' Placements

Mechanical Branch Selects (2014-2018) Batch

- ✓ Saikiran Srivatsav , E.G.Soundarya has placed in Maker Global
- ✓ Adarsh Harapanhalli, Pendyala Thirilochan Sharma, Gandla Sai Nithin, Mohammed Abdul Moiz, Chintala Akhil, Battala Rahul, Anjali Priyadarshini Thati has placed in Amazon
- ✓ Mohammed Abdul Moiz, Anjali Priyadarshini Thati has placed in Genpact
- ✓ Krishnabharath, Rajesh has placed in Caiman solutions
- ✓ Voddineni Himaabindu Rao, E.G.Soundarya has placed in Talentio