# Mechanical Engineering Department News Letter

### "We Build Machines that Build Nation"

#### Vision

- To strive for making competent mechanical engineering Professionals to cater the real time needs of Industry and Research Organizations of high repute with entrepreneurial skills and ethical values.
  - MISSION
- To train the students with state of art infrastructure to make them industry ready professionals and to promote them for higher studies and research.
- To employ committed faculty for developing competent mechanical engineering graduates to deal with complex problems.
- To support the students in developing professionalism and make them socially committed

## MODERN TRENDS IN TECHNOLOGY

## **Digital Manufacturing :**

- As there are more number of automated tools in the manufacturing industry, it is the duty of the industry to model, run the simulation and analyse the machines, input materials and tooling.
- The name indicates that the manufacturing is controlled by means of numbers or numerals in the digital form i.e. write the G codes and M codes in a program and that can be operated by means of a central computer.



Robotic simulation using Robcad software for virtual manufacturing

### Faculty Focus: Faculty publications:

- Dr.B.Venkatasiva professor published a Journal paper entitled "Effect of modifier oxides on spectroscopic and optical properties of Pr3+ doped PbO-Ro2O3-WO3-B2O3 glasses (with Ro2O = Sb2O3, Al2O3, and Bi2O3)" Journal of Luminescence (Accepted for Publication LUMIN\_2020\_938-Elsevier Publisher, IF-3.28, SCI Indexed).
- P.Sravani Assistant professor published a Journal paper entitled "Experimental investigation on a diesel engine performance and emission characteristics with exhaust gas recirculation (EGR) system fuelled with cotton seed oil and tyre oil biodiesel" International journal of analytical and experimental model analysis, Vol XII, Issue VII, August-2019.
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- Dr.B. Venkatasiva professor published a Journal paper entitled "Influence of modifier oxides on spectroscopic features of Nd2O3 doped PbO-Mo2O3-WO3-B2O3 glasses(with Ro2O3 = Sb2O3, Al2O3, and Bi2O3)".
- Dr.B.Venkatasiva professor published a Journal paper entitled "Experimental Studies of Mechanical Properties and Tribological Behaviour of Aluminium Composite Reinforced With Coconut Shell Ash Particulates" Int. J. Materials Engineering Innovation, 2019, Vol. 9, No.2, pp. 140-157. Inderscience Publishers-Scopus indexed-SNIP-.326.Cite Score-.36
- Dr.D.Jagadish professor published a Journal paper entitled "Aerodynamic Performance of Micro Aerial Wing Structures at Low Reynolds Number", INCAS BULLETIN, Volume 11, Issue 1/ 2019, pp. 107 – 120 (P) ISSN 2066-8201, (E) ISSN 2247-4528.
- Dr.D.Jagadish professor published a Journal paper entitled "BEM Prediction of Wind Turbine Operation and Performance", INTERNATIONAL JOURNAL of RENEWABLE ENERGY RESEARCHVassishta Bhargava et al., Vol.8, No.4, 2019.
- K. Ayyappa Swamy Assistant professor published a Journal paper entitled "THE NUMERICALANALYSIS OF BUBBLE GROWTH AND BUBBLEFREQUENCY IN NUCLEATE BOILING USING NANOFLUIDS", in International Journal of Mechanical and Production Engineering Research and Development, no.9, Issue 3, Jun 2019, pp.1259-1274.
- Dr.Suneel Donthamsetty and Penugonda Suresh Babu professor published a Journal paper entitled ""Investigations on Hardness, Machinability and Electrical Conductivity of A356 Nanocomposites Reinforced with Sic Nanoparticles (Synthesized through Stir casting allied Ultrasonic Assisted Cavitation)", International Conference on Advances in Material Science & Mechanical Engineering (ICAMSME 2020), 7th to 9th Feb 2020, N.B.K.R. Institute of Science & Technology (Autonomous), Vidyanagar, Nellore Dist, A.P (Submitted and Registered on 14-12-2019.

#### Workshops attended

- Dr.B.Venkata Siva professor has attended a eight day Workshop on "FDP Applied Robotics Control Lab", organized by Indo-European Skilling Cluster for Mechatronics and manufacturing by European Centre at VIT- Amaravathi during 05/08/2019 to 12/08/2019.
- R.Ravindranath Assistant professor has attended a three day Workshop on "International conference on Advances in Renewable Energy and Green Technology,ICARE-2019", organized VIT- Amaravathi during 22/08/2019 to 24/08/2019.
- Dr.B.Venkata Siva professor has attended a five day Workshop on "Mechatronic Systems and Product Design", organized Global initiative of Academic Network at NIT-Warangal during 16/12/2019 to 20/12/2019.

#### **Faculty Achievements:**

- S.Sivanjaneyulu Assistant professor from department got Engineering Assistant govt job.
- J.Yesudas Assistant professor from department got Engineering Assistant govt job.
- P.Krishna Sudhakar Assistant professor from department got Engineering Assistant govt job.

# **Department activities:**

Department has Organized a Six day short term training program on "EMPLOYABILITY SKILLS", in association with NANDI (NGO) Foundation, MAHINDRA & MAHINDRA & APSSDC for final year students during 01/07/2019 to 06/07/2019 2019.



Department has organized a Five day short term course on "EFFECTIVE TEACHING", in association with NITTTR – Kolkata during 15/07/2019 to 19/07/2019.



Department has organized a One day guest lecture on "LIGHT WEIGHT COMPOSITES FOR SPACE APPLICATIONS", by Dr.P.S.Ramasreekanth Associate Professor, VIT, Amravati, acted as a resource person on 20/07/2019.



Department has organized a six day training program on "SOLID EDGE", in association with APSSDC for third year students during 22/07/2019 to 27/07/2019.



Department has organized a Five day short term course on "RURAL DEVELOPMENT THROUGH TECHNICAL INSTITUTION", in association with NITTTR –Kolkata during 29/07/2019 to 02/08/2019.



Department has organized a Five day short term course on "ADVANCES IN MANUFACTURING", in association with NITTTR –Chandigarh during 09/09/2019 to 13/09/2019.



Department has organized a "ARC LAB", Inauguration program by Honorable MP L.Srikrishna devarayulu garu ,and MLA Gopi reddy srinivas reddy garu and NEC Honorable Chairman M.Koteswararao garu, Vice chairman M.Chakravarthi garu, NEC Secretary M.Ramesh babu garu participated in this on 02/11/2019.



Department has organized a One week Faculty development program "DESIGN AND MANUFACTURING ON 3D EXPERIENCE PLATFORM", in association with NITTTR –Kolkata during 29/07/2019 to 02/08/2019.



Department has organized a One week short term course for final year students on "INDUSTRIAL ROBOTICS & FIELD INSTRUMENTS", in association with AGIIT-Chennai during 26/11/2019 to 30/11/2019.



Department has organized a One week workshop for second year mechanical students on "AUTOCAD", in association with APSSDC during 23/12/19 to 28/12/19.



Department has organized a Guest lecture for Third year mechanical students on "TYPICAL SOFTWARE OPPORTUNITIES FOR MECHANICAL ENGINEERS", by Dr.G.Srinivasarao Lead Engineer at Aero Thermal Lab ,Global research center, Banglore on 30/12/2019.



# Student Focus STUDENT PARTICIPATIONS IN WORKSHOPS / CONFERENCES/NSS PROGRAMS:

- N.Siva Naga raju (17471A0379) third year student has attended workshop on "Drone Awareness workshop", organized by JNTU-N Narasaraopet on 27-07-19.
- Six students from third year mechanical have participated in "Ganesh Idol Competition", organized by NEC-Narasaraopet on 31-08-19.
- Three students from third year mechanical have attended workshop on "Automobile &IC Enginer", at Hyderabad during 21/09/2019 to 22/09/2019.
- Seven students from third year mechanical have attended workshop on "Kart Design Challenge", organized by Sri Indu College of engineering & Technology, Hyderabad during 21/12/2019 to 22/12/2019.
- Department has organized NSS program on "CHLORINATION", by final year students on 16/07/2019.



Department has organized NSS program on "CHLORINATION", by final year students on 17/07/2019.





Department has organized a Ten day workshop for Second and Third year students on "DESIGN AND FABRICATIONOF THERMAL SYSTEMS", by Action Engineers Pvt.Ltd,Hyderabad during 11/02/2019 to 20/02/2019.



Department has organized a Four day workshop for Second and Third year students on "Non Destructive Testing Methods (With Case studies)", by BITS Vizag Pvt.Ltdduring 13/02/2019 to 16/02/2019.



# **Industrial Visits**

50 Students from Third year Visited "CARRIAGE & WAGON Workshop", Guntur as a part of industrial visit on 14/07/2019.



50 Students from Third year Visited "CARRIAGE & WAGON Workshop", Guntur as a part of industrial visit on 16/07/2019.



50 Students from Third year Visited "CARRIAGE & WAGON Workshop", Guntur as a part of industrial visit on 18/07/2019.



Students from Third year Visited "CARRIAGE & WAGON Workshop", Guntur as a part of industrial visit on 19/07/2019.



Students from Third year Visited "CARRIAGE & WAGON Workshop", Guntur as a part of industrial visit on 20/07/2019.



Students from Third year Visited "CARRIAGE & WAGON Workshop", Guntur as a part of industrial visit on 23/07/2019.



50 Students from final year Visited "KUSALAVA INTERNATIONAL LIMITED", Adavinekkalam, Vijayawada as a part of industrial visit on 17/08/2019.



50 Students from final year Visited "KUSALAVA INTERNATIONAL LIMITED", Adavinekkalam, Vijayawada as a part of industrial visit on 18/08/2019.



Students of second year A section visited "KUMAR PUMPS", Tenali Guntur as a part of Industrial visit on 22/08/2019.



Students of second year B section visited "KUMAR PUMPS", Tenali Guntur as a part of Industrial visit on 22/08/2019.



Students of second year visited "SAGAR CEMENTS POWER PLANTS", Nakarikallu Narasaraopet as a part of Industrial visit on27/12/2019.



#### Student Achievements in sports and technical events

- $\geq$ T.Akhil sai (17471A0301) third year student has participated in "Paper Presentation", organized by JNTU-N Narasaraopet on 26-09-19.
- $\geq$ Students from Mechanical Second year participated and won second prize in "kabaddi", game at KallamHaranadha reddy during 12/09/2019 to 13/09/2019.
- Students from Mechanical third year participated and in "Volley Ball", game at NRI Institute of Technology during 13/09/2019 to 14/09/2019.
- Students from Mechanical Second year participated and won  $\geq$ second prize in "Volley Ball", game at KallamHaranadha reddy during 13/09/2019 to 14/09/2019.
- $\geq$ Y.Pradeep (18471A0336) second year student has attended in "Technical Quiz", organized by A.M.Reddy college of Engineering & technology during 28/12/2019 to 29/12/2019.
- Five students from third year mechanical have participated in  $\geq$ "Technical Quiz", organized by PALNADU SSN College -Narasaraopet during 28/12/2019 to 29/12/2019.
- ➤ K.Sandeep (18471A0322) second year student has attended in "Technical Quiz", organized by A.M.Reddy college of Engineering & technology during 28/12/2019 to 29/12/2019.
- $\triangleright$ Students from Mechanical Second year participated and won second prize in "kabaddi", game at KallamHaranadha reddy during 12/09/2019 to 13/09/2019.

### **Campus Placements:**

38 students of Mechanical got selected in various companies listed below

		Salary
	No.of	Package(Lakh per
Company Name	students	annum)
TATA STRIVE	21	1.80
INTITUTION		
SYSTEMS	1	2.5
WICKERIDE	16	2.35
Total	38	

### Academic Toppers

The following students are toppers in the end examinations in their respective classes



Cn.Asnok	1.Siva Reddy
19471A0305	19475A0312
9.2	9.0





P.Kishore

G.ChandraSekharaReddy

18475A0369

9.32

16471A0348 9.05



I am a student of NEC and would like to whole heartedly announce that, NEC has provided me a wonderful environment and opportunity to learn and grow myself academically. It was a great time, spent in NEC. The four years spent here was splendid and has helped me excel professionally as well as personally. Apart from academic, department offers various opportunity to enjoy our college days which was attracting us towards college many of the time. The relation between faculty and student is very cordial, which gave me an opportunity to excel further.

# P.Gopi Krishna (2014-2018Batch)

ENGINEERING ASSISTANT , ANDHRA PRADESH GOVT.



Student Voice

I feel very blessed to be a Mechanical engineering student in Narasaraopet Engineering college. Our faculty who are inspiring the future Technocrats, they taught us technical strategies, they mentor, guide us and teach classes in a practical manner and encouraged each and every student's interests.Our backbone is our HODDean (Acad.) Dr.D.Suneel sir who encourages studentideas and creats a platform to develop their ideas.

P.Mallikharjuna Rao III-B.Tech, (17471A0311)

"You have to dream before your dreams can come true".A.P.J.Abdul kalam