

# rajvada news

Department of Mechanical engineering  
R.V.R. & J.C. College of Engineering, Guntur-522019

Volume 19

Jan - June, 2018

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Printed and Published by  
**Department of Mechanical Engineering**

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### Role of Mechanical Engineer in the present Energetic Context

In spite of the fact that over 50 years ago, it was addressed that human activities affect the global environment, only in the past few years have societies and a few governments started to face this situation responsibly.

In the words of Isaac Asimov "It is change, continuing change, inevitable change, that is the dominant factor in society today. No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be...."

Before Mechanical Engineering, physicists were responsible for applying theories and making experiments to try and solve daily human issues. Step by step, their scientific tests led to the construction of relatively simple machines. Time and resources saved by these machines brought them to the attention of industry and it was discovered that they were useful, which triggered an increasing demand for equipment and devices that were more and more complex. Indeed, the Industrial Revolution arose as a consequence of the gradual introduction of equipment into the markets, which after some time let them become prosperous factories and companies.

During the 19<sup>th</sup> and 20<sup>th</sup> centuries, knowledge was increasing because information was available at a larger scale. Knowledge of the structural matter, electromagnetic phenomena, chemical elements; laws of motion, and of energy transformation processes, were been discovered and extended, giving rise to a greater specialization of the discipline.

Mechanical engineering is one of the broadest and oldest branches of engineering. Mechanical engineers are involved with the design, analysis, testing, manufacturing, control, operation and maintenance of mechanical systems. They are multi skilled, has global opportunities. Without **ME** no one can get the things like engines, generators, elevators or even air conditioning.

### Research Projects in Progress:

- Two UGC Projects worth 12 lakh and 4 lakh, received by Dr.K.Ravindra, Professor and HoD , on 'Development of High Strength Polymer Matrix Composites Reinforced with Metallic Glass Particulates' and 'Fabrication and Characterization of Nano Al<sub>2</sub>O<sub>3</sub> reinforced Magnesium Metal Matrix Composites' in 2014 are completed.
- Dr.K.Ravindra was granted with a forty thousand worth, Institution of engineers UG2015029 Project - Design and Fabrication of 3D Printer . This project is completed.
- Ms..D.Swapna, Asst. prof. received a 3 lakh worth UGC sponsored project on 'Flow forming behavior of Extra drawn Al6061 under warm deep drawing' .This project is in progress

### Guest Lectures Delivered:

- Dr.N.V.V.S.Sudheer delivered lecture on "Design and Analysis of Heat Exchangers" Saint Martins Engineering College, Hyderabad.
- D.Sameer Kumar delivered a guest lecture on "Decision Making in pharmacy practice" at NRK & KSR Gupta College of pharmacy , Tenali on 02 Feb,2018..

### Research Papers Publications:

- Vijayabhaskar kurapati, RavindraKomineni& Srinivasan Sundarrajani "Statistical Analysis and Mathematical Modeling of Dry Sliding Wear Parameters of 2024 Aluminium Hybrid Composites Reinforced with fly ash and sic particles", Transactions of the Indian institute of Metals, ISSN 0972-2815.
- Jush Kumar Siddani , Dr. C. Srinivas, G. Moses Dayan "Comparitive study on mechanical and thermal behaviour of glass fiber reinforced epoxy based composites with Sic & Tio, international journal of engineering sciences & research technology( IJESRT) ISSN: 2277-9655, 7(4): April, 2018
- Mr. Jush Kumar. Siddani, Dr. C. Srinivas, Mr. L. Srinivas Naik, Mr. T. Chandra Sekar Design and Experimental Validation of Composite Pressure Vessel, International Journal of Engineering Science Invention (IJESI) ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726 www.ijesi.org || Volume 7 Issue 4 Ver. II || April 2018 || PP 15-19.
- N.Santhi Sree, N.V.V.S. Sudheer & P. Bharama "THERMAL ANALYSIS OF CLOSED LOOP PULSATING HEAT PIPE" International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN (P): 2249-6890; ISSN (E): 2249-8001 Vol. 8, Issue 2, Apr 2018, 21-36.
- K.Nageswara rao, V.Chittaranjan das " Design And Thermal Analysis Of Al/Sic Mmcs For Connecting Rod" International Journal of Applied Sciences, Engineering and Management ISSN 2320 – 3439, Vol. 07, No. 02, March 2018, pp. 34-43
- M.Naga Swapna, V.Chittaranjan Das, M.Gopi Krishna "Mechanical Behaviour and Structure properties of LM 25/ Cu Particulate Reinforced Metallic Composites" JMES 2018.
- S.Ravi Sekhar, V.Chittaranjandas, D.Govardhan, R. Karthikeyan "Effect Of Tool Rotational Speed On Friction Stir Spot Welded Aa5052 – H38 Aluminum Alloy" Materials Today: Proceedings 5 (2018) 5536–5543.
- M. Vijaya, Dr. K. Srinivas 'Development and Mechanical Properties of SiC Reinforced Aluminium Metal Matrix

Composites' Journal of Recent Activities in Production Volume 3 Issue 1, Apr 2018.

- M. Vijaya, Dr. K. Srinivas 'A Brief Review on AL6351' International Journal of Trends In Scientific Research, Vol.2 | Issue 3 Issn No: 2456 - 6470 Apr 2018 Page: 835 647.

### Paper Presentations in Conferences

- T.V.S.R.K Prasad,Kolla.Srinivas,C.Srinivas "a multi-product a multi –period production distribution planning model for supply a supply chain with partial information sharing", international conference on contemporary design and analysis of manufacturing and industrial engineering systems(CDAMIES-2018) at NIT Trichy.
- T.V.S.R.K Prasad, Kolla.Srinivas, C.Srinivas "Decentralized production – distribution planning in a supply chain: computer experiments", ICAMME-2018 at ANU. 2214-7853 c 2018 Elsevier Ltd
- B. Ramgopal Reddy, C. Srinivas, "Fabrication and Characterization of Silicon Carbide and Fly Ash Reinforced Aluminium Metal Matrix Hybrid Composites", ELSEVIER, ScienceDirect, Materials Today: Proceedings 5 (2018) 8374–8381
- Jush Kumar Siddani, C. Srinivas, N. Nagabhushana Ramesh, "Topological surface of H.S.S and Titanium31 using micro electro discharge machining" , National Conference on Advanced Materials, Manufacturing and Metrology (NCAMMM - 2018) on 16-17 February, 2018 at CSIR-CMERI, Durgapur.
- D.Swapna presented a paper on "Formability of Lightweight materials-A review", International Conference on Advances in Materials and Manufacturing Engineering (ICAMME-2018), Department of Mechanical Engineering ,University College of Engineering & Technology,22nd -24th January 2018.
- Reddy Sreenivasulu, Shaik Hidayath Hussain, Raga Veera Vineeth, Raavi RamaKrishna, Vijay Dasari, Pappala Suresh., presented and published a paper entitled "Some Investigations on End Milling of Inconel 718 Super alloys" in the proceedings of National Conference on Recent Trends in Manufacturing held on 29th March,2018 organized by College of Engineering(Autonomous), Andhra University, Visakhapatnam, Andhra Pradesh, INDIA.
- Dr. B. Ramgopal Reddy and Sneha H Dhoria, "Effect of alkaline treatment on mechanical properties of kenaf fiber reinforced polyester composites", AIP Conference Proceedings, 020097 (2018), doi: 10.1063/1.5029673, pp: 1-8, published by American Institute of Physics.

### Conferences/ Workshops Attended:

- Dr.V.Ramakoteswara rao, J.Rangaraya Chowdary, Sneha H Dhoria and K.Snehitha attended AICTE sponsored short term course (QIP) "Ultra High Precision Machine Tools – Design and characterization" organized by the CATDept. of mechanical engineering during 5- 10 march,2018 at IIT Madras.
- J.P.Kartheek attended a short term course on Nonlinear Partial Differential Equations: Theory and Numerics during 22-27Jan,2018 at IIT Madras.

- Dr. B. Ramgopal Reddy and J.P.Kartheek attended a short term course on Finite element method for engineers from all disciplines at IIT Madras during on 26-31-March, 2018.
- Dr.V.C.Das attended a Faculty development programme on “Advanced CAD-CAM Applications In Cnc Machining” conducted by Indian Institute of Technology Kharagpur during 20-26 April 2018
- Dr. B. Ramgopal Reddy, Associate Professor, Department of Mechanical Engineering attended Foundation program ICT in Education
- (IITBombayX - FDP101x) and Pedagogy for Online and Blended Teaching-Learning Process (IITBombayX - FDP201x) from March 15 to April 15, 2018 and May 3 to June 17, 2018 respectively, an online program supported by IIT Bombay in association with our college remote centre.
- Dr.C.tara sasanka attended a one week qip-stc on "First course in computational fluid dynamics: development, application and analysis" conducted by IIT BOMBAY during 24-29 June, 2018.

### Academic Results

Year	Total Appeared	Total Pass	Pass %
IV/IV B.Tech (VIII Semester)	196	194	98.98
III/IV B.Tech (VI Semester)	187	149	80.54
II/IV B.Tech (IV Semester)	198	125	63.13
I/IV M.Tech (II Semester)	175	113	64.57
I/II M.Tech (I Semester)	12	7	58.33

### Hybrid Vehicle Challenge-2018, BIC Noida- Jan 17- 19 , 2018



### CAT Activities



### SAE Activities

25-01-2018 28-01-2018	E-BAJA, Natrax Indore
12-02-2018 16-02-2018	GOKART DESIGN CHALLENGE 2017, Kari Motor speed way. Coimbatore
16-03-2018 19-03-2018	FORMULA KART, DESIGN CHALLENGE, MECOKARTPIO, BANGLORE
17-01-2018 19-01-2018	Hybrid Vehicle Challenge-2018, BIC Noida
03-01-2018 06-03-2018	Student Kart design challenge, Gurramguda, Hyderabad



**MECH MANTRA- 2K18**

Mechmantra - A national level technical student meet organised by Department of Mechanical Engineering. Various events were organized like EngineX, Robotics, Water Rocket, Auto-CAD techie, Quiz competition, Paper presentation on January 2018.



**RVR & JCCOLLEGE OF ENGINEERING**  
(AUTONOMOUS)  
CHOWDAVARAM, GUNTUR-522019  
ACCREDITED BY 'NBA' AND NAAC 'A' GRADE.



A NATIONAL LEVEL TECHNICAL STUDENT MEET

# MECH MANTRA

## 2K18

### JAN 5

-  **ENGINE X**
-  **ROBOTICS**
-  **WATER ROCKET**
-  **AUTO-CAD TECHIE**
-  **QUIZ COMPETITION**
-  **PAPER PRESENTATION**

**CONVENER:**  
DR.V.CHITTRANJAN DAS  
PH.NO-9491108250

**CO-ORDINATORS:**

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