



SIR C.R.REDDY COLLEGE OF ENGINEERING
DEPARTMENT OF MECHANICAL
ENGINEERING

NEWS LETTER

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NOVEMBER-2017

PRINCIPAL'S MESSAGE



I would like to share with you for the publication of first news letter for this academic year 2017-2018 in the “Department of Mechanical Engineering”. The staff and students continue to be engaged in a board range of activities centered around learning, teaching research and outreach. I invite you to read about some of them by this newsletter released in this semester. Thank you for your readership and ongoing support of our distinctive program .

-- G.SAMBASIVA RAO

VISION OF THE COLLEGE

To emerge as a premier institution in the field of technical education and research in the state and as a home for holistic development of the students and contribute to the advancement of society and the region.

MISSION OF THE COLLEGE

M1:To provide high quality technical education through a creative balance of academic and industry-oriented learning.

M2:To create an inspiring environment of scholarship and research.

M3:To instill high levels of academic and professional discipline.

M4:To establishes standards that inculcate ethical and moral values which contribute to growth in career and development of society.

FROM H.O.D'S DESK



Season's greetings to all of you..

The odd semester of academic year 2017-2018, The “Department of Mechanical Engineering” releasing this “News Letter” to enlighten every one with the activities and achievements of both staff and student community of our department. These activities are helpful in grooming the overall personality of students and also boosting their confidence. I congratulate the staff and students who are involved in publication of this News Letter.

Staying together is ‘progress’ working together is ‘success’.

--DR.VENKATESWARA RAO

VISION OF THE DEPARTMENT

To be a center of excellence in the field of Mechanical Engineering in this region where the best of teaching, learning and research synergize with a broader sense of social responsibility.

MISSION OF THE DEPARTMENT

To become a nerve center for academic excellence in Mechanical Engineering for all-round development of students by

M1 Creating an environment conducive for high quality teaching and learning.

M2 Enabling the students to meet the challenges of the industry through research oriented education and entrepreneurial activities.

M3 Inculcating ethical values and responsibility towards environment and society with leadership qualities

GLIMPSE OF MECHANICAL

- ❖ Students achievements
- ❖ Placements
- ❖ Student participation
- ❖ Staff achievements
- ❖ Works shops
- ❖ guest lectures
- ❖ Sports and games
- ❖ Cultural activities
- ❖ Research publications
- ❖ Departmental library



I am currently working as a Professor in the department of Department of Mechanical Engineering, Sir C R Reddy College of Engineering. I had graduated from Andhra university in the year 1991, I have obtained my M.Tech Thermal Engineering from J.N.T.U College of Engineering, Hyderabad in the year 2001 and I have been awarded with Ph.D. from Andhra University, Visakhapatnam in the year 2009. My research areas include Alternate fuels, I.C engines and Gas Turbines.

Sir CRR COE is a truly excellent organization focused on imparting knowledge and skills beyond the curriculum. The ambience of Sir CRR COE is quite unique in many ways. The cohesive atmosphere allows sufficient time to discuss the topics in depth and communicate extensively with the students. It gives better opportunity for great learning and teaching experience in a very friendly atmosphere. It is honor to be a part of Sir CRR Society. It gave me an immense opportunity to develop a invaluable professional and interpersonal relations among the teaching fraternity. The most important aspect was sharing my research experience with colleagues and encouraging them to enroll in research and various activities which is helpful to the organization.

Moreover, Sir CRR COE is always expanding with new skill development centers which give wider job opportunities to the students. This institution has its own brand image imparting quality education to the rural community. It has been a privilege and a pleasure to contribute my ideas and honing the students for a better future. Altogether an excellent opportunity to the budding engineers which I can strongly recommend to join this esteemed and prestigious institution.

Dr.K.Rambabu
Professor,
Dept. of Mechanical Engineering

STAFF



WELL QUALIFIED & EXPERIENCED FACULTY

The department has 29 teaching faculty members out of this 6 are doctorates. One has submitted his thesis. The remaining staff members are m.tech degree holders and well experienced. They are from reputed institution. Average experience is more than 12 years.

SUMMITE

SUMMITE (Sir C.R Reddy Ultimate Macho Mechanicals in Technical Excellence) conducted events: The department of Mechanical Engineering of Sir C.R.Reddy College of Engineering formed a departmental body named as SUMMITE in the year of 2003, which help the students to develop themselves technically and personally. This organizing body SUMMITE is elected by 2nd , 3rd and 4th year students of the mechanical Engineering department in every year to organize various events. In a year minimum four seminars (i.e. minimum two for a single semester) and two workshops in a year are organized by this body to expose the students to the current developments in research area. This body also organizing a technical paper presentation contest in our college named as TECHFEST in every year, a number of students from various engineering colleges which are located in and around ELURU are participating in this paper presentation contest and received fabulous prizes who secured 1st , 2nd and 3rd places. Some of our students so far have achieved good ranks in GATE and are pursuing higher education in reputed institutions and many more students are selected in various multinational companies by the participation in the following events.

1. JAM: The students are encouraged to present their innovative ideas on technical matters.
2. Group Discussions: The students are encouraged to actively participate in group discussions so as to improve their soft skills as well as technical skills.
3. Quiz: In this module the students are assessed for their knowledge in technical subjects, political, sports etc.
4. Sports: Students are encouraged to actively participate in sports to get laurels for the college.
5. Mock Gate: In this module, the students are encouraged to participate in Mock Gate in order to improve their technical skills.

SUMMITE GALLERY



ELECTION



MOCK GATE



SPORTS EVENTS



1. **Chapala. Divya Bharathi** with registered no. **314177120019** has got the second prize at the paper presentation contest at " Vishnu Institute Of Technology" in the event of VALIANT on 20th & 21st December 2017. Paper titles:-1. Hybrid suspension system using fuzzy logic control electromagnetic suspension system2. Nanotechnology - Eye on the Future.

HYBRID SUSPENSION SYSTEM USING FUZZY

Abstract:

Electro magnetic suspension system (EMSS) is an independent-revolutionary suspension system that reacts instantly to changing road conditions by neglecting the up and down movements of the wheels. Our paper proposes to amalgamate the features of superior control and greater comfort in a single system. To achieve this we have designed a system that uses a linear electromagnetic motor (LEM), which is designed a system that uses a linear electromagnetic motor (LEM), which is mounted on each wheel to push and pull the wheel without jostling the car body. The electromagnetic motor use input from sensors throughout the vehicle designed to adapt to our system so as to react to bumps and potholes instantaneously .This is done by exerting downward force to extend the wheel into pot holes while keeping the car level constant. as the wheel pops back up onto the road, the suspension recaptures nearly all the energy expended. we have designed a powerful control algorithm which is controlled by fuzzy logic unit so as to provide greater momentum and reliability to the system. A detailed model of LEM has been created in which we have focused on stress distribution and displacement analysis under working conditions.

We have also simulated a customized fuzzy logic controller for our system and beyond smoothing out bumpy road the system also improve handling, virtually eliminating body roll in tight turns and minimizing pitching motion during braking and acceleration as depicted in the performance studies.

2. G. Bhargav with registered no. **314177120033** has got First prize at the paper presentation contest at " Vishnu Institute Of Technology" in the event of VALIANT on 20th & 21th December 2017

NANOTECHNOLOGY EYE ON THE FUTURE

Abstract :

this article explores one of the technologies that are poised to change our lives in the near future. The paper emphasizes the importance of this new branch of science , which deals with the manipulation of the basic building blocks of matter ,atom and molecules. Thus with the use of nanotechnology very high precision devices could be built, which could latter replicate themselves. These devices can manufacture anything, pin to car, and even food. Thus a new revolution of manufacturing would be underway. The paper is setup in this direction to understand and appreciate the concept of nanotechnology.

"Nature shows that molecules can serve as machines because living things work by means of such machinery. Enzymes are molecules together. Muscles are driven by molecular machines that haul fibers past one another. DNA serves as data storage system transmitting digital instruction to molecular machines, the ribosome that manufactures protein molecules. And these protein molecules in turn make up most of the molecular machinery just described", said ERIC DREXLER father of nanotechnology.

Nanotechnology, which involves the manipulation of matter at the level of individual atoms and molecules, promises to revolutionize many aspects of human society.AT the very least it can be expected to drastically reduce energy consumption, dramatically advances medicines ability to cure and prevent disease and to significantly increases ability to cure and prevent diseases, and to significantly increases the precision and effectiveness of military devices and weapons>

"CHANGE IS constant"

"Nanotechnology a dream, a perspective, a goal, a revolution, on technology which the present and future world awaits with fingers crossed", said Richard P.Feyman

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