

CANARA ENGINEERING COLLEGE

MECHANICAL ENGINEERING DEPARTMENT

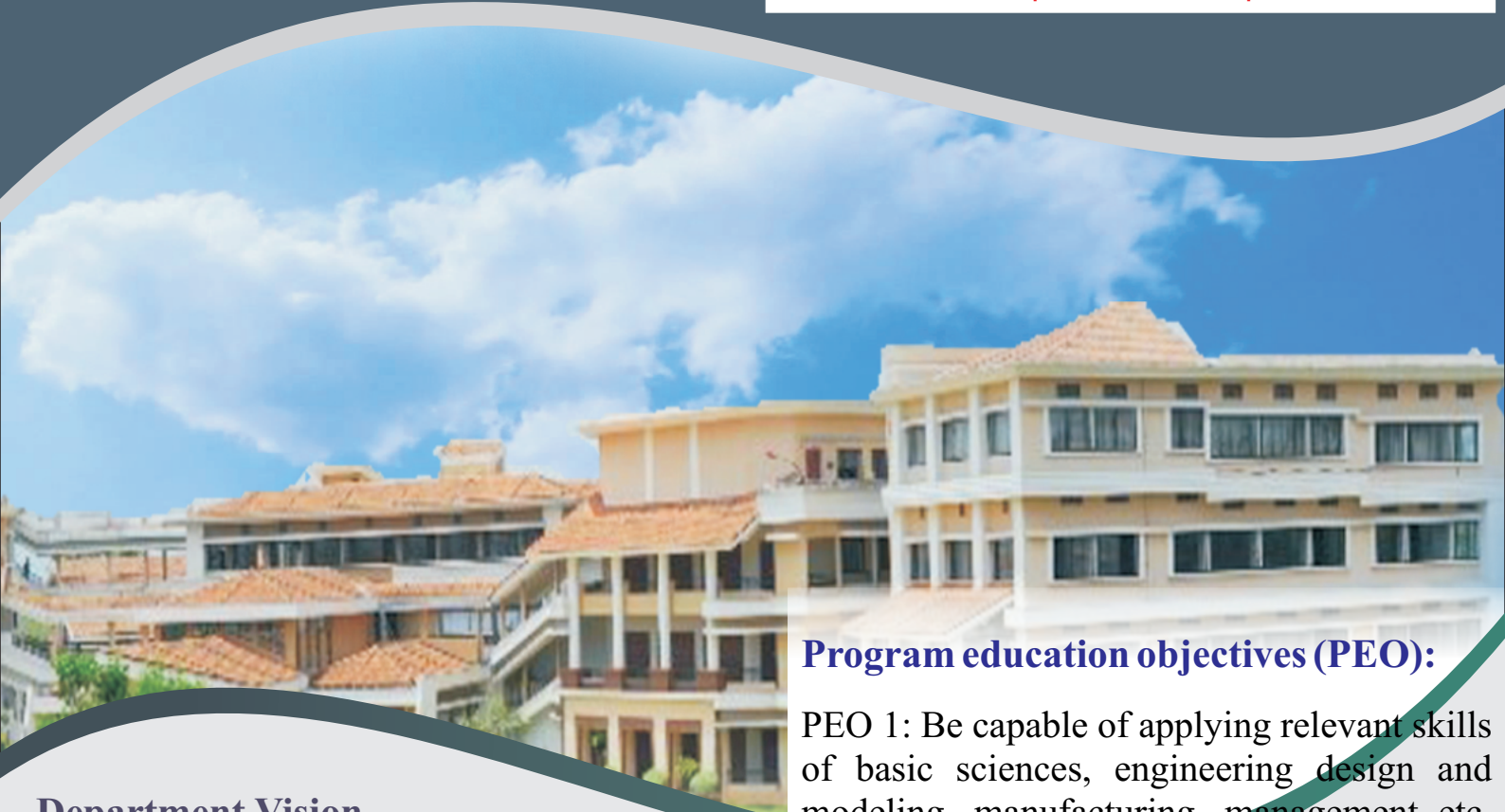
(ACCREDITED BY NATIONAL BOARD OF ACCREDITATION)

NEWSLETTER

MECH MIRROR



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Department Vision

To impart state of the art quality mechanical engineering education and create competent professionals.

Department Mission

M1: Imparting engineering education through experienced faculty, good infrastructure and systematic teaching learning process.

M2 Providing an environment for the application of gained knowledge to design and develop products for industries and research activities.

M3 Promoting high standards of professional ethics and accountability

Program education objectives (PEO):

PEO 1: Be capable of applying relevant skills of basic sciences, engineering design and modeling, manufacturing, management etc. learnt in the programme for their professional career.

PEO 2: Strengthen themselves, using the infrastructure at their disposal, to get placed in the areas of their interest, enter into higher education and take up research assignments so as to meet the challenges of engineering world.

PEO:3 Be able to develop the communication skills, professional personality and ethical values that will mould them into a good human beings, responsible citizens and competent professionals.

Program outcomes

PO	DESCRIPTION
A	An ability to apply the knowledge of mathematics, Science and mechanical Engineering fundamentals.
B	An ability to use principles of mathematics, natural sciences and mechanical engineering sciences to identify, formulate, review and analyse complex engineering problems.
C	An ability to design a mechanical engineering based system, components or processes to meet desired needs with a focus on public health and safety, culture, society and environment..
D	An ability to use research based knowledge to conduct experiments, analyse and interpret data and synthesise information to valid conclusion.
E	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice with an understanding of the limitations.
F	The broad education necessary to assess the impact of mechanical engineering solutions in a legal, health, safety and societal context.
G	An understanding of professional responsibility and accountability and demonstrate the need for sustainability.
H	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice
I	An ability to function effectively both as individual or member or a team leader on multidisciplinary teams..
J	An ability to communicate effectively with engineering community and with society at large
K	An ability to demonstrate the managerial knowledge to manage projects in multidisciplinary Environments
L	Recognition of the need for, and an ability to engage in life-long learning

Program specific objectives(PSO)

PSO1: Capability to assess and solve mechanical and interdisciplinary engineering problems to meet needs of the society

PSO2: Possesses adequate interpersonal skills to solve managerial and technical issues



Listen to HOD

With CBCS scheme introduced by the VTU, department has realigned the programme outcomes. Faculties are working hard to educate our students to meet these outcomes. In this connection, industrial visits, internships are arranged for students. Further, the department is also inviting as many alumni's as possible and arranging their interactions with the student. These activities will help students to plan their future and bring them closer to the industry or universities for higher studies. As a further step in this direction department is all set for "Skill Development" for students in over fifteen areas. This activity is to start from coming semester. In this regard, we had invited our correspondent and renowned entrepreneur Mr. Padmanabha Pai to guide us and share his thought on "Importance of skill development in students". Department is grateful to Mr. Padmanabha Pai for guiding us on skill development. I congratulate the publication committee for bringing out 6th volume of Mech Mirror.

Dr. B. Krishna Prabhu
Prof & Head



From editor's desk:

Smart city- Scope for technology enhancement and startups

Demonetization of notes by the government has forced people to go for cashless transactions. Students of present generation have already been using it and it is their responsibility to educate people in this regard. Looking at the positive side of the demonetization, it has opened new ways of developing a secured transactions which in turn benefitting the students in getting software, mobile app development projects from industries. Educating public on cashless transaction is also our responsibility which inturn contributing to the economic development of the country.

As the technologies are growing, education also should be in line with it to grab the opportunities. In this regard department is planning to have internal skill development and competitive exams training like GATE which will help Students going for higher study and getting jobs. No technology can survive without proper back up from research area. Mechatronics will be of major importance in a days to come.

Congratulations to all toppers and i wish all the best for the coming semester.

Sandesh Kumar Rai
Chief editor

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STUDENT NEWS

PLACEMENT ACTIVITY

The Placement process is ongoing and total of 21 offers from various companies to the mechanical students during the semester.

Company Placed	Number of students
TECHMAHINDRA	11
SLK software	04
HGS	05
IBM	01

CO-CURRICULAR ACTIVITIES

INDUSTRIAL VISITS

The objective behind industrial visits is to get insight regarding the working environment of a company and how a company functions and make them understand expectations of the industries from fresh engineers.

◆ Industrial visit was arranged on 22nd October 2016 to ACE foods, Ganjimath, Mangalore .74 students of 5th semester along with staff members gained the knowledge on Supplying, manufacturing, exporting and distributing of food products, banana chips, corn mixture, potato chips and food industry.



◆ Industrial visit on 25th October 2016 to Canara Springs, Mangalore was arranged. 98 students of 3rd semester along with staff visited the factory. Canara Springs one of the leading experts in suspensions and pioneers in leaf springs. The company is the first of its kind to start indigenous laminated leaf spring manufacturing in India and also among the first to introduce advanced technologies to improve the performance of leaf springs, manufacturing of leaf springs for heavy commercial vehicles, light commercial vehicles, passenger vehicles and also for passenger cars.



- Industrial visit was arranged on 22th October 2016 to KMF Mangalore Dairy Ltd. 74 students of 3rd and 5th semester along with staff visited the Milk & Food processing industry.



- Industrial visit to SAN Industry and BEML, Mysore was arranged on 27th August 2016. 49 students of 5th semester along with staff visited the industry and gained knowledge on locomotive industry.



INTERNSHIPS BY THE STUDENTS

Internships Undertaken by students are as follows.

Sl. No	Name of Organisation / Industry	No. of Students
1	MRPL, Mangalore	05
2	BPCL, Kochi Refinery	01
3	Abhay Engineering	04
4	Plant-Tech, Mangalore	02
5	Srikrishna Milks, Yellapur	01
6	Nuetech, Bangalore	07
	Total	20

BRANCH ENTRY FUNCTION

The Branch entry function for 2nd Year Mechanical was organized on 01st August 2016. The Principal, HOD, domain heads along with faculty, technical staff and all students were present. The program started with student interaction with faculty regarding the department plan for the academic year and changes in the department rules and regulations. Third semester

- ◆ students were welcomed by higher semester students. Students performed cultural and gaming events. The cultural program began with Mr. Avinash Prabhu as the MC and various programs and games were conducted for the students and staff.



CONFERENCE, SYMPOSIA, SEMINARS, WORKSHOPS ATTENDED BY THE STUDENTS

- ◆ Kishore Pai and Nakul Kamath Students of 7th Sem Mechanical Engineering along with faculty member attended one day Workshop on “Startup India a seminar on Entrepreneurship” held at Gokarna Math Mangalore on 28th August 2016
- ◆ Amaranth shenoy, Avinash prabhu, Athul kamath, Deepak shenoy and Pratik kindalkar attended IISC climate science quiz at IISc Bangalore on 27th September 2016.
- ◆ Glen Franson Saldanha attended workshop on fabrication and testing of composite materials on 21 and 22nd October 2016 at MIT, Manipal.
- ◆ Vinayak Rao, Venkatesh Murthy and Nirbhay S Badal attended TED MITE talk at MITE, Moodbidri on 5th November

ALUMINI INTERACTIONS

- ◆ Mr. Ajith Shetty, Senior Manager at Bunt solar systems gave talk on “Research, Business And Job Opportunities In Solar Energy Sector” 3rd of November 2016. The speaker gave a brief introduction to the different solar energy trapping methods and the government policies towards setting up of solar power plants. The process cycle of starting up of solar plant was briefed. Starting from survey till installation and maintenance of the same. The role of various disciplines of engineering in setting and maintenance of the plant and roles were explained.



- ◆ Alumni Mr Pushyanth gave talk on “How to crack IAS exams” on 16th September 2016 to the final year students. He interacted with the final year students and briefed them about competitive exams. He also stressed on the importance of studying basics of mechanical engineering and updating the Mechins with the current affairs of the country.



- ◆ Mr Ramdas Kamath gave talk on “Job opportunities for the post of Insurance surveyors on 17th September 2016 to the final year students. He is a certified Insurance surveyor from the Indian Institute of Insurance Surveyors and Loss Assessors. He discussed about the career opportunities in this field and also told the importance of Mechanical engineering in order to be a successful surveyor. He also briefed about the entrance exam patterns for the same.

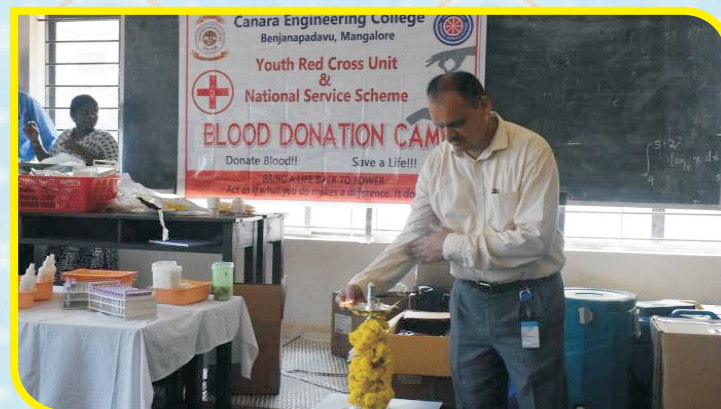


TECHNICAL TALKS

- ◆ A talk on Solve lab by Prof Gangadharan from NITK was arranged on 23 August 2016. 58 students attended the programme.
- ◆ A talk on “Importance of Higher education” was arranged on 9th September 2016 by Mr. P N Santhosh, Co founder Byju's Classes. 120 students participated in it.

EXTRACURRICULAR ACTIVITIES

- ◆ 55 students from Mechanical department donated blood in NSS-red cross blood donation camp held in CEC on 18th October 2016.



- ◆ 50 students of Mechanical along with NSS visited nearby Netrakere Government school and conducted various educational activities from and apart from their syllabus to enable them to understand various concepts with practical examples on 18 September 2016



- ◆ 6 students and mechanical staff along with the NSS Unit of CEC visited the Govt. Higher Primary School, Netrakere on 30th July 2016 for Vanamahotsava. The Staff and Students of the school also joined the activity. Students planted a few fruit bearing plants to enrich the campus of the school. The activity helped in knowing the importance of plants and reducing deforestation.



SPORTS EVENTS ATTENDED BY STUDENTS

- ◆ Arjun Kamath, Kishore Pai and Sathvik Baliga participated in Rest of bengaluru zone chess (men/women) tournament at SJMIT Chitrdurga on 13th and 14th September 2016
- ◆ Akshay N Shet participated in VTU Mysore zone cricket tournament at NIEIT Mysore on 19th and 20th Sept. 2016
- ◆ Aditya Kamath, Vignes Bandarkar, Shivakumar P, Rajat, Krishna, Ankith sheregar participated in VTU level Mangalore zone Hockey tournament at NMAMIT, Nitte on 30th August 2016. secured third place.
- ◆ Deepak H Shenoy and Supreeth secured 3rd place in VTU intercollegiate Badminton tournament held at Yenepoya Institute of Technology Moodabidri from 21st to 23rd September 2016.
- ◆ Kaushal had participated in VTU level Mangalore Zone Table Tennis tournament at SDIT Managlore and won third place which is held on 28th and 29th of September 2016.
- ◆ Harshitha participated in VTU level Mangalore Zone throw ball tournament at SDMIT Ujire held on 7th October 2016



FACULTY NEWS

FACULTY DEVELOPMENT PROGRAM AND TECHNICAL TALKS

♦ “ Lab to Market through technology readiness” talk by Dr. Sandesh kamath was arranged on 28 Novemeber 2016 to the faculties of mechanical engineering department. He briefed about the petent process for the projects.

♦ Technical talk on “ Skill development and its significance among engineering students” was arranged by the department on 29 November 2016. Mr. M Padmanabha Pai, Correspondent of CEC and renowned entrepreneur was the resource person.



RESEARCH PAPERS PUBLISHED IN INTERNATIONAL JOURNALS BY THE FACULTY

◆ “Analysis of a non gasketed composite flange for preload and operating conditions” by Sunil Kumar B V, Sathish Nadig Vasanth Kumar and Sandesh Kamath published IJRET, eISSN; 2319-1163, volume: 5, pg no: 46-52

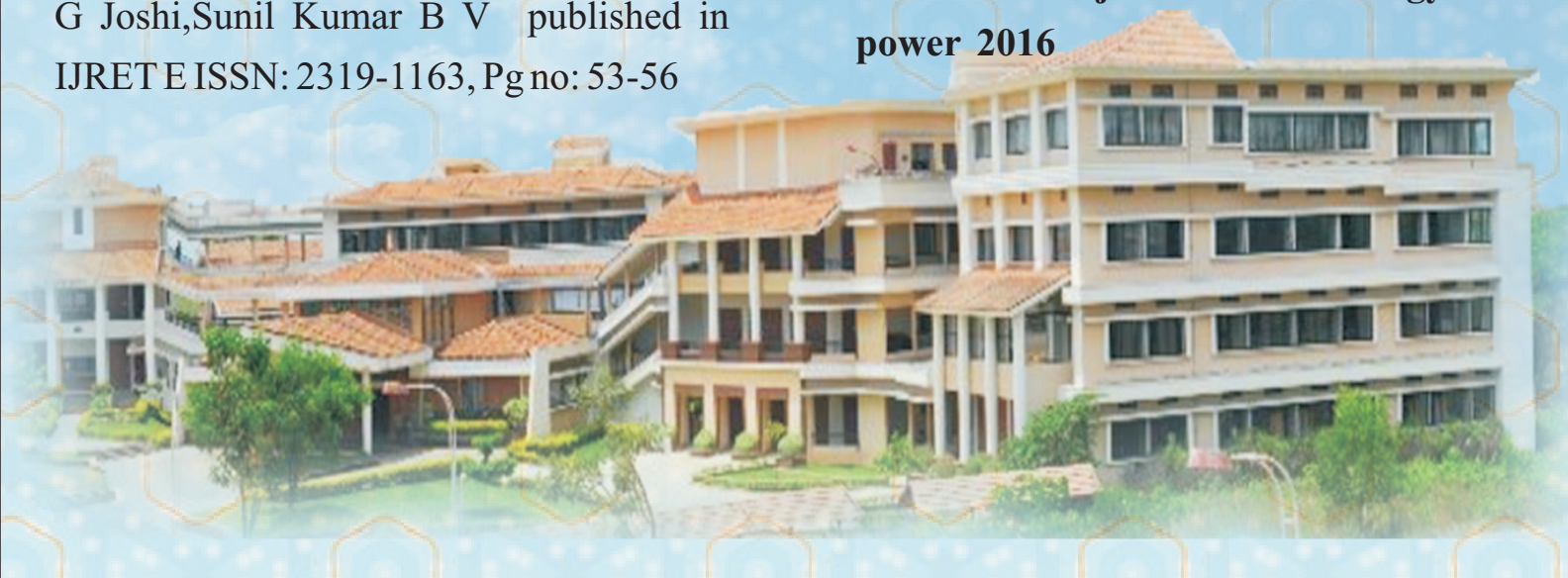
◆ “Study on tribological behavior of ZA-27/ Al_2O_3 /Gr MMC” by Ajith Joshi, Ramesh Desai, M V Prashanth, S Sandeep published in International Journal on Emerging Technologies ISSN: 0975-8364, Pg no: 117-122

◆ “Study on influence of cryogenic treatment on mechanical properties of AlSi10Mg alloy” by Ramesh S Desai, Ajith G Joshi, Sunil Kumar B V published in IJRETE ISSN: 2319-1163, Pg no: 53-56

◆ “An experimental study on enhancement of convective heat transfer over dimpled surfaces” by Prashant Kamath, Paramashivaiah, Niranjana Rai, Shreenath published in Journal of mechanical engineering and automation, 2016, 6(5A): p126-130

◆ “Studies on effect of various surfactants on stable dispersion of graphene nano particles in simaruba biodiesel” by Paramashivaiah, published in IOP conference series; material science and engineering 149(2016)012083, doi:10.1088/1757-899x/149/1/012083

◆ “Investigation of properties of different blends of castor and pongamia biodiesels and their performance in compression ignition engine” by N Satheesh Kumar published in international journal of Energy and power 2016



PAPER PRESENTATIONS BY THE FACULTY

- ◆ N Satheesh Kumar presented a paper “Comparison of clustering algorithms for RBFNN modeling of LPG Diesel dual fuel engine power prediction” in International Conference on Recent Trends in Engineering & Technology – 2016, School of Engineering, Cochin University of Science & Technology, Cochin, Kerala
- ◆ N Satheesh Kumar presented a paper “Radial Basis Function Neural Network (RBFNN) Based Modeling in LPG-Diesel Dual Fuel Engine with EGR” in International Conference on Advances in Materials, Manufacturing, Management & Thermal Sciences – AMMMT -2016, SIT, Tumakur,

CONFERENCE, SEMINARS, WORKSHOPS ETC. ATTENDED BY FACULTY

- ◆ Lohith R had attended National conference on “holistic approach to lifestyle disorders” at MIT, Manipal from 13th to 14nd December 2016
- ◆ Sandeep S, Sandesh kumar Rai, Vasanth Kumar Lohith R, Sandesh Kamath attended FDP on “Chalk Talk: a faculty skill enhancement program” at CEC, Dept of CSE on 4th Aug 2016.
- ◆ Sandesh Kumar Rai attended Summer course on “Applied CFD and finite element analysis using ANSYS” held at MIT, Manipal from 4th to 13th July 2016.
- ◆ Paramashivaiah B M, Venkatesh N, Ramesh Desai, attended FDP on “Outcome based education” at CEC from 16th to 20th June 2016.
- ◆ Sandeep S, Naveen kalal attended workshop on “Manufacturing excellence through automation and robotics” at NIE on 2nd and 3rd December 2016.

