



CANARA ENGINEERING COLLEGE

MECHANICAL ENGINEERING DEPARTMENT

(ACCREDITED BY NATIONAL BOARD OF ACCREDITATION)



NEWSLETTER

MECH MIRROR

VOLUME 7

ISSUE 1

JANUARY 2018



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 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

It is encouraging to observe that students are orienting to our plans in building them industry ready. In this respect the department had organized SDP, peer to peer workshops, in-house symposium etc. The response of the students for all these activities is overwhelming. This semester onwards the department is planning to work on placements for our students especially off campus placements. We are looking forward for the support of our alumni in whatever possible ways that they can. I am thankful to all our alumni, students, faculty, principal as well as our management for extending their support in all the activities that department is conducting. Further, congratulations to our publication committee for putting forth this edition of mech mirror in a neat format.

Dr. B. Krishna Prabhu
Professor and Head

EDITORIAL BOARD

Staff Advisors:

Dr. B Krishna Prabhu, HOD
Dr. Venkatesh N, Professor.

Chief editor:

Sandesh Kumar Rai
Assistant professor.

Student coordinators:

Vignesh shenoy
Harish hedge
Ganesh R Gouda
Vishwanath bhat
Prateek Shetti
Rahul Rao
Vignesh Shanbhag
Amith B N

From editor's desk**Electric vehicles to address air pollution problems.**

Dear reader,

The recent air pollution level in Indian capital city Delhi is alarming. The growing demand for renewable pollution free vehicles forcing automobile companies to look for alternate fuels including electrical vehicles. Technologies on IC engines will be going to be absolute in a year to come. Research on fuel cell/ hydrogen cell/ battery technologies are growing in faster phase. The developing countries which are importing crude oils and fuels will get the maximum benefit from these revolutions. The automobile industries are producing smart cars than never before. Indian automobile companies like Tata and Mahindra have started producing electrical vehicles to Energy efficiency services Ltd (EESL), a government body to support pollution free efficient devices and in turn to achieve pollution free vehicles in India by 2030.

So, we will be going to witness the same in a year to come. Hence students need to focus on these energy efficient device areas in their project works too. I congratulate all toppers and wish all the best for the exams and coming semester

Prof. Sandesh Kumar Rai

Chief editor

**STUDENT NEWS****PLACEMENT ACTIVITY**

The Placement process is ongoing and total 5 offers from various companies to the mechanical students during this odd semester of the academic year 2017-18.

COMPANIES VISITED	Selected
SLK SOFTWARE	2
Host zyro	3
TOTAL	5

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.

- 58 Students from 2nd year Mechanical along with 2 faculties visited two industries GTTC and Deccan plast, Mangalore on 8th September 2017.



- The Deccan Plast Industries has an advanced “state of the art” factory in Mangaluru, constructed in the standards matching any MNC factory having latest

injection molding machines and molds and other equipment. It is powered by latest technology complemented by in-house R & D and product development. Deccan Plast products processing 100% virgin plastic granules.



- Government Tool Training Centre (GTTC) Mangalore with Karnataka Government in collaboration with the Government of Denmark under the bilateral development co-operation agreement is giving training on tool manufacturing. Students gained knowledge of tool room.



- 106 Students of 3rd semester visited Lamina foundry, Nitte on 25th and 26th of October 2017. They manufacture castings of motor bodies, flywheels, valve bodies and brake drums. Students gained the knowledge on Foundry, moulding and manufacturing processes



- Nuclear Power Corporation of India Limited, Kaiga. NPCIL is responsible for design, construction, commissioning and operation of nuclear power reactors. 48 students along with 3 faculties visited on 23rd September 2017 witnessed the developments in nuclear power at NPCIL





- New Mangalore Port Trust (NMPT) has become the first among 12 major ports in the country to go completely green without depending on external sources for energy and water and extending green cover in its sprawling premises. The 4 MW plant has come up at Peacock Garden, in NMPT residential colony. As many as 16,608 solar panels of 256 Wp have been erected on the ground. 110 students visited along with 4 faculty members under the banner of solar energy society of India visited on 10th October 2017.



- BEML Truck Division at Mysore was visited on 16 September 2017. It is located around 130 Kms from Bangalore. It was established in 1986 with a total

area of 600 acres. Asia's biggest Dump Truck Factory in India is located at Truck Division, Mysore. The products manufactured at Truck Division are Mining & Construction, Dump Trucks. It has manufacturing facilities on dumper assembly, welding robot also. 89 students along with 3 faculty visited the company.

INTERNSHIPS

- 33 students have taken internship at JSW Energy Centre of Excellence, Ballari from 18-10-2017 to 24-10-2017
- 4 students had taken internship at divisional Electrical Engineer rolling stock, southern railway, Palakkad division Kerala from 18-10-2017 to 24-23-2017.

MINI PROJECT EXHIBITION



- Inter departmental mini project exhibition was held on 19th November 2017. 16 mini projects were exhibited.

WORKSHOPS ATTENDED BY THE STUDENTS.



- AVIA Hands on workshop on RC Plane Building and flying was organized by CEC –ISIE –SRA on 4th and 5th of November 2017 in college campus. Mr. Vishal Rao from Kinetic Hobbies was the resource person for the 2day Workshop. 8teams comprising of students from department of Mechanical Engineering participated in the workshop. A total of 46 participants participated in the two-day workshop. Resource person briefed the students on parts of a plane and basic things necessary for the flying. Students were given a demo on how to build the parts of the RC plane and the teams had built their own RC plane by the end of 2nd day. RC planes were flight tested in our college ground.



- 3D printer workshop was held on 4th and 5th of November 2017 under ISIE Chapter of CEC. Mr. Naveen Kalal, Dr. Krishna Prabhu and students Mr Floyd, Mr Chetan, Mr Suhas kamath were the resource persons. 25 students participated and learnt about various 3D printing technology, material used for prototyping, working of FDM based 3D printer, assembling the printer, configure it and calibrate it. They were also taught on Arduino microcontroller board, Arduino programming, design a CAD model, generate the G-code and print the model.





- CAD Modelling for automobiles, 2 days software training for student was held on 4th and 5th of November 2017. 30 students had taken training under faculty of the department Mr.Lohith. In the workshop tutorial about design, sketching, modelling, assembly and drafting overall X,Y,Z axis plane design system were learnt.



- Two days peer to peer, Hands on work shop on Automobiles was conducted from 19 to 20th September 2017 along with Mandovi motors. The participants were given an opportunity to understand various components of automobiles by assembling and dismantling along with theory sessions. On the 2nd day of the workshop students visited Mondovi motors. 30 students participated in it.



- A two days peer to peer hands on work shop on Conventional and Modern Machining was held on 06th and 07th of October 2017. The first day training was held at CNC Lab at CEC. Second day was at general Engineering works (Break drum Manufacturers), Lamina Suspensions, Baikampady. 32 students participated and gained knowledge on CNC machines.

ALUMINI INTERERACTIONS



- Alumni Interaction with final year Mechanical Students on 'Scope for Mechanical Graduates in the field of Elevators' was conducted on 07 August 2017 by Mr. Hanock Sharan D'souza, Graduate Engineer Trainee, Mitsubishi Elevators India Private Limited, Bangalore. A total of 64 students and 3 faculties participated in the interaction.



- Alumni Interacting on 'Heating, ventilation and air conditioning' was held on 06 September 2017. Mr. Jayesh and Mr. Preetham Pai, Graduate engineer trainees at EdgeTech company. A total of 20 students and 2 faculty members participated in the interaction.



- Mr. Clyd Ashly Lobo, alumni and Trainee Engineer, at Ayyappa CNC, Bangalore addressed mechanical students during skill development class on 15 March 2017. He explained about opportunities for the mechanical graduates in CNC. He also briefed about manufacturing process of designing, production, quality control and working environment in his company.



- Alumni Interaction with Pre-Final year Mechanical Students on 'Job opportunities for mechanical graduates in IT concern' was organised on 15 April 2017. Mr. Sooraj Shenoy, Associate Software Engineer, Tech Mahindra elaborated the IT industry. A total of 75 students and 4 faculty members participated in the event.



- Alumni Interaction with Final year Mechanical Students on 'Scope for Mechanical graduates in Pump Manufacturing concern' was conducted on 19 September 2017 by Mr. Suhan Shetty, Senior project Engineer, M.B.H Pumps, Ahmadabad. He stressed the importance of writing the GATE exam and explained about nature of duty of project engineer. A total of 120 students and 4 faculty members participated in the interaction.

TECHNICAL TALKS AND EVENTS



- Importance of Skill Development and detailed description of skill development programs offered by faculty of department of Mechanical Engineering were presented on 16th August 2017. Students of 3rd, 5th and 7th semester attended the programme. A total of 16 Skill development programs were presented before the students.



- Talk on "Internship opportunities in Konkan Railway" by authorities of konkan railway was held on 17th August 2017. 155 Students of mechanical department attended the programme.



- Department of mechanical engineering organized in-house symposium on 28th October and 19th November 2017. All the students of department participated in this event. 25 students are shortlisted for competition for the final round. Department faculties were present during the session as judges.





- Freshers day 2017 was organized on 22nd August 2017. The celebration started with cultural programme and activities to the students like paper tower, bridge on edge and auto quiz. Dr Krishna Prabhu, HOD, guided the students.



- A demo on usage of “Energy efficient suite” mobile apps developed for mechanical thermal, heat transfer, fluid mechanics problems by Mr Muralidhar shenoy, a renowned consultant Tero Tech, US was held on 18th December 2017. He gave a demo on mobile apps developed by him on reliability, life testing of products.



- The college correspondent Mr. M. P. Pai and Mr. Ganesh kamath had an official visit to the department labs on 12th December 2017 to study the feasibility of modernizing the existing machineries of the department to the current technologies.

EXTRACURRICULAR ACTIVITIES





- Students from Canara PU College and SharadaVidyalaya visited Canara Engineering College on 7th, 8th and 9th of November 2017 as a part of 'Career guidance program' hosted by CEC. The students attended an orientation program and visited the various facilities, laboratories of the institute. They were given a demonstration of projects developed by students of engineering.



- Teachers day was celebrated on 6th September 2017. Students payed a tribute to the imparters of education with the melody of music. Faculty Dr. Venkatesh N spoke on occasion and guided on moulding and practice of ethics in students.

- Engineers Day was celebrated in the department on 15th September. Dr.Ganesh V Bhat Principal, Dr B K Prabu HOD and Faculty of department were present. Principal addressed the gathering and insisted students to incorporate the life principles of Sir. M V in their life to become a successful man. He also emphasised on the great thinking and simple life style of Sir.MV on the occasion.



- Ayudha Pooja was celebrated by students of Department of Mechanical Engineering with grandeur on 28th September 2017. The Celebrations included a procession and regional customary practices. Tiger dance by the students was the one of the attraction during the celebration.

SPORTS EVENTS ATTENDED BY STUDENTS

- Students Rohan R Bhat, Jaidev Shivathaya, Shodhan Shetty, Kaushal. Aditya participated in VTU zonal Table tennis competition held at NMIMIT, Nitte on 28th and 29th of August 2017.
- Deepak Shenoy, Sujana Punichithaya, Kiran S, Prithesh Kashi, Kavan Kumar, Suraj Prabhu participated in Badminton competition held at NMIMIT, Nitte on 1st and 2nd of August 2017.
- Sanjan Alva participated weight lifting & power lifting events held SIT Tumkur from 15 to 17 September 2017 and won First place in weight lifting, 3rd place in power lifting.

- VTU Athletic championship held at VTU Belagavi from 2 to 6 November 2017. Students SanjanAlva, Prajwal, Anvith, Dhanush, Clevin Rodrigo, Hamsharaj Kiotian Dhanya Shetty, Aishwarya Shetty participated.
- Sandeep participated in Taekwondo held at Vemana IT Bangalore on 9 & 10 of November 2017

FACULTY NEWS

- Mr. Sadhashiva Prabhu, Associate professor, was awarded with PhD degree for the work entitled “Simulation study of Urea-water solution Injection spray for De-NOx selective catalytic reduction system and modern automobile” from VTU.
- Mr. Satheesh Kumar, Associate professor, was awarded with Ph.D degree for the work entitled “Performance and exhaust emission studies of LPG-Diesel fuel C.I. engine using ANN and fuzzy techniques” from VTU.
- Mr. Gopal Pai joined the college as a teaching faculty during beginning of the semester.

FACULTY DEVELOPMENT PROGRAM



Teaching faculties of department had attended internal FDP on “Aurdino for mechanical projects” at CEC 24th November 2017. Dr Krishana prabhu HOD and Mr Naveen kalal, Mechanical department were the resource persons.

RESEARCH PAPERS PUBLISHED IN INTERNATIONAL JOURNALS BY THE FACULTY

- “Studies on Effect of Injection Timing of Graphene Nanoparticles Blended Simarouba Biodiesel Blend on CI Engine “ by B M Paramashivaih published in International Journal of Engineering (IJE) Vol 30 – Issue 08 August 2017 Pageno.1205-1214, DOI:10.5829/idosi.ije.2017.30.08b.13
- “Studies on Effect of Injection Pressure of Graphene Nanoparticles added Simarouba Biodiesel Blend Fuel on CI Engine Performance and Emission ” by B M Paramashivaih published in Fronteiras: Journal of Social, Technological and Environmental Science, Vol 6 – Issue 2 – Date of Publication - May-August. 2017, Page no. 326-337.

CONFERENCE, WORKSHOPS ATTENDED BY FACULTY

- Dr Venkatesh N attended International Conference on RiMES 2017 and presented a paper “Success of manufacturing industries – Role of Six Sigma” at MIT, Manipal on 23rd December 2017.
- Mr. Sunil Kumar B.V. attended workshop on “Research methodology & latex” at VCET, Puttur from 21th to 23th October 2017.
- Mr Lohith attended workshop on Auto CAD by Autodesk at Bangalore on 22nd December 2017.



CANARA ENGINEERING COLLEGE

MECHANICAL ENGINEERING DEPARTMENT
(ACCREDITED BY NATIONAL BOARD OF ACCREDITATION)



NEWSLETTER

MECH MIRROR