



# Connections

Quarterly Newsletter for Institute's Friends, Patrons, Mentors and Students

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## Inside This Issue

Civil Department

Mechanical Department

ETC Department

Computer Department

Science & Humanities

Training & Placement Cell

NSS

Cultural



## CIVIL ENGINEERING DEPARTMENT

### INTERNATIONAL CONFERENCE AND EXHIBITION ON RECENT DEVELOPMENTS IN DESIGN AND CONSTRUCTION TECHNOLOGIES OF TALL STRUCTURES (REDECON 2016)

The Association of Consulting Civil Engineers(India) Bangalore center had organized an International Conference and Exhibition on Recent Developments In Design and Construction Technologies of Tall Structures at NIMHANS Convection Center, Bangalore from 09<sup>th</sup> - 12<sup>th</sup> November 2016.

This conference was attended by Asst. Prof. Shruti Desai and Asst. Prof. Starina Dias from the Civil Engineering Department which was sponsored by UltraTech Cements Ltd. Eminent speakers from around the world were invited to deliver the keynote lectures on Tall structures. Prof. Mahesh Tandon, Dr. Kamal Hadkar, Preetam Biswas, Nagesh and Madhukar, Mr. Tarek Hassan etc. were some of the key note speakers. Dr. D.S Rajendra Prasad and Mr. Aravind H. Bhashyam were among some of the speakers who spoke on “ Burj Khalifa - Construction and Quality Control” and “Some interesting Design and Construction challenges of the Petronas Towers” respectively. The conference covered topics like the construction methods, dampers to be utilized, precautionary practices etc. to be maintained during construction of tall buildings. It covered some of the geotechnical aspects when constructing a tall building and also the system of plumbing to be carried out for tall structures.

UltraTech Cements Ltd, Penetron, Alfa Peb Limited, Indus 555 TMT, Tiscon, The Ramco Cements Ltd., L&T Construction, Sharp Ply, Alufit (India) Pvt Ltd, Wienerberger India Private Limited, Indian Concrete Institute, JK Cements, Trimble Solutions, Civil Aid Techno Clinic Pvt Ltd. were some of the Sponsors and Exhibitors for the event.

### ONE DAY WORKSHOP ON “MAKING OF QUALITY CONCRETE” IN COLLABORATION WITH ULTRATECH CEMENTS FOR INDUSTRY PARTICIPANTS

The Civil Engineering Department of Don Bosco



College of Engineering organized a one day workshop on Making of Quality Concrete in Collaboration with UltraTech Cement for the Industry participants on 20<sup>th</sup> November 2016.

The Chief Guest for the function was Engr. Chandrashekar Prabhudesai, Chairman of Indian Concrete Institute – Goa Chapter. The function was also graced by Mr. R.G Hegde HOD Civil, Govt. Polytechnic Panaji, Prof. Austin Rodrigues, Lecturer Govt. Polytechnic Panaji and Dr. Neena Panandikar, Principal of Don Bosco College of Engineering Fatorda.

Dr. Neena Panandikar welcomed all the participants to the campus and encouraged them to benefit of the workshop. Engr. Chandrashekar Prabhudesai made the participants aware that in today's world making concrete is not enough, but making of quality concrete is of great importance.

After the tea break Mr. R.G Hegde, delivered a presentation on Ingredients of Concrete. He also threw light on topics like manufactured sand, Crushed dust etc. He also encouraged the industry participants to use PSC (Portland Slag Cement) and PPC (Portland Pozzolana Cement) in their construction practices.

Prof. Austin Rodrigues spoke on Concrete Making right from batching to curing of Concrete. He also highlighted that not only the ingredients of concrete have to be good but also care must be taken during the process of making concrete to achieve durable concrete.

Asst. Prof. Shruti Desai from the Civil Engineering

department, DBCE, spoke on reinforcement detailing in a building. She pointed out various incorrect reinforcement detailing methods carried out on-site and urged the participants to take care when placing reinforcement steel so that the structures last for a longer time.

Post lunch, the UltraTech team took over the session and summarized the workshop. They showed different tests that can be performed on site to check the quality of the ingredients of concrete. They also conducted a practical demonstration on the process of making concrete by hand.

The function ended by presenting mementos to all the speakers as a token of appreciation and gratitude.

The workshop was mainly intended for the contractors and site supervisors to bridge the gap between the theory and actual construction practices carried out on-site. 33 participants attended the workshop.

Asst. Prof. Starina Dias was the coordinator for the workshop.

## STUDY TOUR REPORT (PUNE, 2017)

A study tour for the final year civil engineering students was organised by CESA (Civil Engineering Students Association) of DBCE-Fatorda from 10<sup>th</sup>-13<sup>th</sup> January 2017. The students were accompanied by Asst. Prof. Satyesh Kakodkar and Asst. Prof. Prachi Dessai.

The first day's schedule included a visit to CWPRS (Central Water and Power Research Station). At the site, the students and faculty were greeted by Scientist Bilal Shaikh, Mr. S.B. Apte, Mr. P.S. Wagh and Mr. Anirudha Nagulpille. Scientist Bilal Shaikh explained about the Mormugao port prototype -the components, portions, and features of the port and other hydraulic structures. He also explained the use of distorted, undistorted models, Reynolds Number, breakwaters and turning circle to name a few. They then proceeded to learn about the Jigaon Dam model. The ogee spillway with a steining basin and



the design considerations in designing the spillway about different continuous and cantilever spans were some of the project key features that were unique to the Jigaon Dam project. Mr. Bilal Shaikh also demonstrated and explained the actual working of ports, harbours and breakwaters.

The second day started off with the trip to the College of Military Engineering-Pune. Here, they were greeted by Lt. Col. Manish Kumar Vyas. The students visited the Reinforced Cement Concrete laboratory where Dr. Narkhade explained the components and different models of everyday structures such as the staircase, footings and space frames to name a few. The students also got a chance to visit the model room in which, models showing different reinforcement detailing helped clear their doubts. They visited the Concrete Technology Laboratory where Lt. Col. Manoj Singh explained and demonstrated various new testing equipments, one such being the compressive test for a concrete beam section. They also saw the Environmental Laboratory where Dr. Tirthakar demonstrated and explained various charts and also a live model on sewage and water treatment in Pune. He also explained certain glitches in old sewage treatment plants in Pune which were not capable of completely expelling Nitrogen and Phosphorous from their effluents, hence leading to the growth of wild vegetation on the surface of some rivers in Pune. They were also privileged to see the timber laboratory where they got an opportunity to see various old and new species of timber and also the cause of their deterioration and prevention. They also got a demo and a lecture on the importance and usage of GIS and Total Station by Mr. Ramesh Kumar.

The next site they visited was the Ruby Hall Clinic where they were greeted by Mr. Sunavla, who explained certain aspects and considerations of a Green Building. He also informed us about all the

facilities at Ruby Hall Clinic by which it is accredited as a Green building.

On the third and final day the students visited the Suzlon One Earth campus where Mr. Nitin A. Gurav explained about the campus which was a LEED Platinum accredited Green Building, The criteria for which was laid down by IGBC. The campus at Suzlon One Earth-Pune secured a score of 57 out of 58 credit points. Mr. Gurav then went on to explain the five elements of nature on which The Suzlon One Earth campus was built and practiced on. The elements being water, fire, air, soil and space. The Suzlon One Earth campus is a self-sustained ecosystem having photovoltaic cells being the roofing cover which can power up certain lighting systems. However, one of the major utilisation of energy at Suzlon One Earth is the utilisation of wind energy through wind mills installed around the periphery of the campus and also the utilisation of natural sunlight for lighting even in the basement, which was definitely one of a kind. The Suzlon One Earth campus has a 35lakh litres water harvesting plant. It also has a one of a kind ceiling layer consisting of paper pulp, which does not allow echoing of sounds.

## MECHANICAL ENGINEERING DEPARTMENT

### FIELD TRIP TO CITY ALUMINIUM PVT LTD

The department of Mechanical Engineering organized an Industrial Visit to CITY- ALUMINIUM PVT.LTD Plant located at Margao Industrial Estate, Nessai-Goa. for the Students of T.E. Mechanical, as a part of the curriculum.

CITY-ALUMINIUM PVT. LTD is a leading commercial aluminium window and shop front specialists that manufactures, supplies and installs high quality precision windows and doors for the commercial, industrial, retail, apartment and domestic home markets. The company has been operational for more than 25 years.

Following is the itinerary followed during the visit:

- Arrived at city aluminium manufacturing plant at 2

pm.

- The unit manager Mr. Shivkumar gave the students a tour of the workshop, explaining about different processes and operations carried out. High grade aluminium and UPVC are the two most important materials that the plant works with. The basic difference between the two, UPVC being lighter, more durable and better quality finish. However, the cost of UPVC, being four-fold, limits its usage to fewer applications.



- The UPVC's are imported every six months from countries like China.
- The next section contained manufacturing and assembly unit. In this unit, the window frames and linings were manufactured and subsequently assembled according to the customer suitability.
- Third segment introduced the students to the process of lamination and coating of the finished components. The students learnt about different techniques employed viz., powder coating, spraying, wood laminates, etc.
- The by-products (UPVC) and wastes are not only recycled but also used for other operations such as packaging and shipping.
- Students asked various technical questions regarding the complex process and were answered suitably.

The visit was coordinated by Asst. Prof. Tanay Rege, Asst. Prof. Sanjeel Naik and Lab asst. Mr Arun Sail, of Mechanical Engineering department.

### ASIAN MINISTERIAL CONFERENCE ON DISASTER RISK REDUCTION 2016, NEW DELHI, INDIA

This first Asian Ministerial Conference for Disaster Risk Reduction after the advent of the Sendai

Framework was hosted by the Government of India. As a follow-up from the 6<sup>th</sup> Asian Ministerial Conference outcome (2014) and as a requirement of the Sendai Framework, the intended outcome of the conference was to adopt an 'Asia Regional Plan for Implementation of the Sendai Framework'.

While Prime Minister Narendra Modi inaugurated the function, Home minister Rajnath Singh, Mr. Robert Glasser, head of the UN Office for Disaster Risk Reduction (UNISDR) and special representative of the UN secretary general were few of the other notable dignitaries that were present for the inaugural function. Many sessions and talks were delivered by various experts to adopt strategies and list stakeholder action statements containing various initiatives to reduce disaster risk during this 3 day conference.

As a part of this conference many renowned organisation, national and international, took part in exhibition for disaster risk management. DRDO, UN volunteers, WHO, National Disaster Response Force were a few of the prominent organisations among 40 other organisations which demonstrated their products and work carried out by them during various natural calamities and disasters.

Don Bosco Incubation Centre, Goa in association with DRDO-FICCI ATAC Programme also took part in this exhibition wherein three of the alumni of Don Bosco College of Engineering, Mr. Sujay Shirodkar, Mr. Myron Rodrigues and Mr. Rakib Sarmadi along with Asst. Prof. Chetan Gaonkar displayed final year projects. The projects were highly appreciated by visitors. Few of the prominent persons who visited the exhibition stall were Dr. Sudhir Mishra,

Outstanding Scientist & Chief Controller R&D, DRDO, Mr. Manoj Bhardwaj, Director of Public Interface, DRDO.

## GUEST LECTURE BY DR. S. L. GOMBI



A Guest Lecture on “Student Participation in Technical Competitions” was organized by Department of Mechanical Engineering on 14<sup>th</sup> January 2017. The speaker was Dr. Shrinivas Gombi, Professor and Head of Department of Mechanical Engineering, Gogte Institute of Technology, Belgaum. The talk was attended by around 150 students of 1<sup>st</sup> and 2<sup>nd</sup> year Mechanical Engineering along with faculty members of the Department.

Dr. S. L. Gombi spoke about various competitions like the “Hyperloop” conducted in USA and shared his experiences. He also threw light on Indian Championships like “Go karting” etc. He provided information on design, fabrication, application, resources required, funding etc. and showed videos of various events. Associate Prof. Ajit Salunke, HOD, Mechanical Department thanked Dr. Gombi for sharing his experiences with the students. The talk was coordinated by Asst. Prof. Manjunath Narvate and Asst. Prof. Raymond Joseph.

## ONE DAY WORKSHOP ON “GRAPHICAL PROGRAMMING WITH LABVIEW”

Associate Prof. Ajit Salunke, HOD Mechanical Engineering Department organised a One day workshop on “Graphical Programming with Labview” at Girijabai Sail Institute of Technology, Karwar on 27<sup>th</sup> August, 2016. The workshop was attended by final year students of Mechanical





Engineering and Electronics and Telecommunication Engineering along with faculty members.

Associate Prof. Salunke gave an introduction to National Instruments software “Labview” and its application in virtual instrumentation, process control, condition monitoring, SCADA, remote monitoring & diagnostics, medical devices, computerised test rigs etc. He delivered a hands on session on the software and covered programming basics of Labview. He also dealt with the topics on Data Acquisition and various DAQ devices used in industries. Labview is extensively used for research applications across the world.

The Principal at Girijabai Sail Institute of Technology, Dr. Suresh D. Mane welcomed the gathering and Head of Department of Mechanical Engineering, Prof. Shashank Divgi proposed the vote of thanks.

## **ONE WEEK WORKSHOP ON “INTRODUCTION TO HYPERMESH”**

One week workshop on “Introduction to Hypermesh” was Organised by Mechanical Engineering Students Hub (MESH) in association with Department of Mechanical Engineering from 2<sup>nd</sup> to 6<sup>th</sup> of January 2017 at CAD Lab, DBCE.

HyperMesh is a multi-disciplinary finite element pre-processor which manages the generation of the largest, most complex models, starting with the import of a CAD geometry to exporting ready-to-run solver file. Hence this course was designed for final year mechanical engineering students to get hands on training on Hypermesh.

The main course instructor was Mr. Amey Chodankar, Teaching Assistant at Wayne state university, USA who shared his hands on experience on Hypermesh with students along with Prof. Ramdas Pandit of Goa Engineering college. The other speakers from Mechanical Engineering Dept. of Don Bosco College of Engineering were Associate Prof. Ajit Salunke, HOD, Asst. Prof. Chetan Gaonkar and Asst. Prof. Raymond Joseph. The topics covered were Introduction to Finite Element Method, Mesh refinement, 1D and 2D meshing, geometry cleanup, 2D meshing and analysis.

The course was attended by Final year students and faculty members of Department of Mechanical Engineering. The course was coordinated by Asst. Prof. Chetan Gaonkar and Asst. Prof. Sachin Turi.

## **TWO DAYS WORKSHOP ON BIODIESEL PROCESSING AND QUALITY CONTROL**

Asst. Prof. Sharad Shanbhag from Mechanical Engineering Department attended a two days workshop on “Biodiesel processing and quality control” held at Central Leather Research Institute (CLRI), Chennai on 24<sup>th</sup> and 25<sup>th</sup> January 2017 organized by Brooklynn Innovative Research & Development. The resource faculty were scientists from CLRI, Mr. K.C.Vellappan, Sr. principal scientist, CLRI and Dr. N. Vedaraman, Senior Technical Officer, Chemical Engineering division.

The course content was mainly focused on creating awareness among the participants to produce and use biodiesel as the fossil fuels are exhausting. Mr. K.C.Vellappan explained about biodiesel as the simple alkyl monoesters of long chain fatty acids derived from renewable feedstock's which is the most suitable substitute to diesel. For this reason, the research on this biofuel is steadily growing all over the planet. Dr. N. Vedaraman explained about the biodiesel production and the various methods to extract biodiesel from different raw materials. A hands-on session was carried out by Miss Sandhya demonstrating how biodiesel can be produced and different tests conducted to check the quality of biodiesel produced. Dr. Sukumar, CEO, BIRD explained about the various raw materials that can be

used to produce biodiesel. A session on Industrial safety was also conducted.

During the valedictory function Mr. B. Chandrashekar, Director, CLRI congratulated the BIRD team for taking initiative and organizing the workshop.

## STUDY TOUR TO KAIGA NUCLEAR POWER PLANT



On 28<sup>th</sup> of January 2017, The Department of Mechanical Engineering organized an Industrial Visit to Kaiga Atomic Power Station in association with Institution of Engineers, India, DBCE student chapter for T.E. and B.E. Mech students for their study tour as a part of the curriculum. Kaiga Power generating station situated at Kaiga, near the river Kali in Uttara Kannada district of Karnataka, India. The plant has been in operation since 2000 and is operated by the Nuclear Power Corporation of India (NPCIL). It has four units and all of the four units are small-sized plants of 220MW. The unit, fueled by indigenous uranium, will supply the electricity to Karnataka, Andhra Pradesh, Kerala and Tamilnadu.

Students had the opportunity to hear and learn from the training officials regarding the geometrical structure of the plant, its construction and working, the method of power generation, the safety and security measurements. Students visited the model room. A detailed presentation on the 'Nuclear Power Plant Aspects and Radiation' was given by Shri U.P. Subramanya Kumar, scientific assistant F, bringing out the advantages of nuclear energy, it was stated that nuclear power is a compact source and does not emit any greenhouse gases. The plant process was explained pictorially with figures and schematics.

The radiation dose due to Kaiga Units is negligible compared to natural background radiation he said. The environmental radiological survey is carried regularly to assess the radioactivity in the region. It was highlighted that radiation is present everywhere and even in the food consumed by us. Radiation doses received due to air travel and medical exposures are higher compared to radiation doses from plant to public. He stated that apart from the power generation, Kaiga Generating Station is also committed to welfare of the neighborhood. Since the beginning, Kaiga is engaged in the welfare activities particularly in the field of Healthcare, Education, Infrastructure and Skill Development. Later the students were taken to the simulation center where one can learn actual simulation of controlling and keeping track with the operations of the entire power plant using computer with specific softwares like UNIX, SCADA. The trainees first need to get proper training in the simulation center before they could be placed in the actual control unit.

On their return journey the students also visited Kadra Dam. Asst. Prof. Sharad Shanbhag, Asst. Pro. Manjunath Narwate, Asst. Prof. Suraj Marathe and Associate Prof. and HOD Ajit Salunke accompanied the students on their visit.

## INTERNATIONAL WORKSHOP ON RESEARCH AND APPLICATION OF ADVANCED COMPOSITES AND MATERIALS (IWonRAACM), SDMCET, DHARWAD.

International Workshop on Research and Application of Advanced Composites and Materials (IWonRAACM) was organized by Mechanical Engineering Department of SDMCET, Dharwad on 7<sup>th</sup> and 8<sup>th</sup> December 2016. The workshop was attended by Associate Prof. Ajit Salunke (HOD, Mech.), Asst. Prof. Swapnil Ramani and Asst. Prof. Manjunath M Narwate. The workshop gave an insight into the recent advances and research avenues in the field of Composite Materials. The keynote sessions were delivered by Dr. Prasad Potluri and Dr. Arthur Wilkinson, University of Manchester, Manchester, United Kingdom. Eminent scientists from CSIR-NAL, ADE-DRDO enlightened on the recent research developments carried out on applications of



composite materials in Unmanned Aerial Vehicle (UAV), Fighter (Tejas) and Consumer (Boeing, Airbus etc.) planes. Research Scholars from reputed institutions like NITK, Amrita School of Engineering etc. delivered sessions on their research works. The faculty had enriching experience at the workshop and also had informative interactions with the resource persons.

## ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING DEPARTMENT

### WORKSHOP ON "INTRODUCTION TO MATLAB"

A one day workshop titled 'Introduction to MATLAB' was conducted on 14<sup>th</sup> of January for the S.E. ETC students, at the Signal Processing Lab.

The workshop commenced with a technical session on 'Introduction to MATLAB', by Asst. Prof. Madhukar A. Besides providing basic information and state of art examples of Matlab, he introduced the key stages in Matlab i.e. Introduction, Numeric computation, Matrix Manipulation. This was



followed by hands on session on fundamental modules and tools of MATLAB. Asst. Prof. Madhukar explained the Basic applications, Array generation, Matrix manipulation, Matrix calculation. MATLAB programs to generate an array, modify the array, generate a matrix, modify the matrix and perform operations on a matrix. This was followed by MATLAB codes to perform various functions on matrix, ie. Addition, subtraction, multiplication, and division of matrix.

The second session of the day commenced with session on 'Coding in Matlab' which included the introduction on the various advantages of coding in MatLab over other coding languages, introduction to the various windows and it's application in coding such as The Command Prompt Window, The Workspace Window, the Command History Window and implementation of codes to perform the various arithmetic operators, use of various functions in Matlab and to perform plotting, display and various operations on the signals in MATLAB. The sessions were engaged by Mr. Pio Nathan Pereira.

The workshop was coordinated by Asst. Prof. Madhukar A and Mr. Pio Nathan Pereira.

### FIELDTRIP VISIT AT INFINYT3D

The students of third year Electronics and Telecommunication engineering branch were taken for a field trip as a part of the industrial exposure that the college ensures for the students.

The students were taken to Infinyt3D, a consulting agency for 3d printing at Cortalim, Goa. The agency provides services for prototyping and designing of various projects using reliable materials like ABS, nylon, etc. to have a set idea of how the product should look like once under manufacture.

The field trip conducted under the D-BEATS organisation was conducted on 3<sup>rd</sup> Feb 2017. The students were shown around the office and the workshop by Mr. Ryan Vaz, the owner of the agency. The students were also explained the process undertaken to achieve the final product.





Mr. Vaz hoped that the students would also make use of the idea of 3D printing in their future projects.

The students showed enthusiasm in learning and understanding more about the nuances of 3D printing. The students were accompanied by Asst. Prof. Selvyn Fernandes and Asst. Prof. Madhukar Achar and the visit was coordinated by Asst. Prof. Kimberly Morais.

### **FACULTY DEVELOPMENT PROGRAMMES: NPTEL ONLINE CERTIFICATION COURSE ON PRINCIPLES OF MODERN CDMA/ MIMO/ OFDM WIRELESS COMMUNICATIONS**

Asst. Prof. Deron Rodrigues participated in an 8 Week NPTEL Online Certification Course on Principles of Modern CDMA/ MIMO/ OFDM Wireless Communications. It was held from 17<sup>th</sup> July 2016 to 9<sup>th</sup> September 2016. The topics covered were: Introduction to Wireless Systems, Performance in Fading wireless channels, Multiple Antenna Wireless Systems and Diversity, Wireless Channel Characterization - Delay Spread and Doppler, Principles of CDMA Wireless Communication, Principles of MIMO Wireless Communication and Principles of OFDM Wireless Communication. Asst. Prof. Deron Rodrigues scored 89% marks in the Online Certification exam held on 18<sup>th</sup> September 2016 and was awarded Elite Certificate.

### **WORKSHOP ON “PCB DESIGN”**

To fulfil the Industry goals and requirements the department of Electronics and Telecommunication Engineering in association with DBEATS conducted a one day workshop on “PCB Design” on the 14th of

January, 2017 for the second year students of ETC. 57 students attended the workshop.

The workshop started with a motivational and interactive talk on “PCB Design”. The resource people for the workshop were Asst. Prof. Flavia Leitao and Asst. Prof. Mathilda Colaco, faculty at DBCE, Fatorda.

The following topics were covered during the workshop:

- Understanding of the Circuit
- Knowledge of component packages
- Testing the circuit on breadboard
- Drawing circuit layout and transferring mirror image of layout on PCB
- Masking to remove the unwanted copper
- Etching
- Drilling and mounting of components
- Soldering
- Testing.

The circuit implemented on the PCB was an “Astable Multivibrator”

At first the students were given a brief explanation on the different stages involved in PCB designing using power point presentation.

The Students were then trained to read datasheets followed by brief understanding of the different packages (TO-92, TO-220, etc) and also the different types of parts (Through holes and Surface mount) along with the soldering methods (wave soldering and reflow soldering) for the same.



The students had a hands-on experience in designing the PCB.

The coordinators for the workshop were Asst. Prof. Flavia Leitao and Asst. Prof. Mathilda Colaco.

The students showed great zeal and enthusiasm in designing the PCB and the satisfaction and joy to see the circuit work was overwhelming. The workshop was a fruitful and a very successful event.

## **TEQIP II ISTE STTP ON “INDUSTRIAL AUTOMATION & VIRTUAL INSTRUMENTATION”**

A one week TEQIP II ISTE STTP on “Industrial Automation & Virtual Instrumentation” was organized by the Electronics and Telecommunication Engineering Department in association with the Electronics and Instrumentation Department of Basaveshwar Engineering College, Bagalkot (Karnataka) from November 7<sup>th</sup> to 11<sup>th</sup> 2016.

The workshop commenced on 7<sup>th</sup> November 2016, with an inaugural ceremony in the distinguished presence of Mr. Jose Noronha, Chairman of Goa Public Service Commission who was the Chief Guest and Prof. Krishnamurthy Bhat Associate Professor, Department of Electronics & Instrumentation Engg, Basaveshwar Engineering College- Bagalkot, who was the Guest of Honor for the occasion. The other guests present on the occasion were, Director of Don Bosco College of Engg., Rev. Fr. Kinley D’Cruz, Principal of DBCE, Dr. Neena Panandikar, Head of Department of Electronics and Telecommunication Engineering Asst. Prof. Michelle Viegas, Head of Department of E&IE Dept. Prof. C.L.Chayalakshmi.

Asst. Prof. Michelle Araujo e Viegas, formally welcomed all the dignitaries and participants of the workshop. Program coordinator, Asst. Prof. Kimberly Morais introduced the workshop and explained the need to know about the technology that is used for automation and also briefed on the schedule of the workshop. Dr. Neena Panandikar thanked the Chief Guest and Guest of Honor for participating in the function. She also appreciated the Electronics and Telecommunication Engineering Department for putting in efforts to organize the workshop. Rev. Fr. Kinley D’Cruz addressed the gathering and spoke on the importance of maintaining individual identity and being yourself despite the pressures of the world.

Prof. Krishnamurthy Bhat, addressed the gathering and stressed that everyone needs to believe in the spirit of going ahead, spirit of believing in oneself.

Mr. Jose Noronha, in his address spoke about advancement of technology in the field of electronics and how electronics and telecommunication technology can turn one’s dreams into reality. He encouraged Electronics and Telecommunication Engineers to be innovative and contribute to society and use technology effectively and efficiently.

The vote of thanks was proposed by Asst. Prof. Selvyn Fernandes. The inaugural function was compered by Prof. Anisha Cotta.

The first session on **Day 1** commenced with the key note address by Prof. K. Bhatt. His session was followed by a session by Prof Chayalakshmi, who gave a brief introduction on Virtual instrumentation and data flow programming followed by hands on session on building VI using express VIS and Programs with Sub VIS.

**Day 2** of the workshop commenced with the session on “Loops in LAB VIEW” by Prof. Chayalakshmi, wherein the participants acquired programming skills with different loops like FOR Loop and WHILE loop and also knowledge about shift registers and feedback nodes. The second session for the day included “Structures in Lab VIEW” Case structures, Flat and stacked sequence structures and formula node.



The post lunch session was also delivered by Prof. Chayalakshmi on "Arrays in Lab VIEW". During this session she elaborated on Arrays, Creating arrays with Loops and various Array functions. This session was followed by a session on Waveform charts, Waveform Graphs, XY graphs in Lab VIEW. Various programs in LabVIEW were implemented.

On **Day 3**, the session commenced with the introduction to Event Sequencing in LabVIEW. In event sequencing, the program first waits for events to occur, responds to those events, and then returns to wait for the next event. Under this, the speaker introduced a function called as clusters. Clusters are data structures that group together different types. Various examples on clusters were implemented. A brief demonstration on DAQ was given and the various functions associated with it were introduced. Transducer and signal conditioning unit was then explained.

Post lunch participants along with the speakers attended a field trip to Zuari Agro Chemicals Limited (ZACL). The field trip began with a safety presentation by Mr. Govind Lotlikar, Manager – Safety and Precaution. Following this, there was a session by Mr. Om, who explained the process flow of the Ammonia, Urea and NPK plants. He explained the entire process of manufacturing right from raw materials stage to the finished product.

The last session of the day was presented by Mr. Sushant Shetye, Asst Manager Instrumentation Department. Mr. Shetye explained the various field devices used in the plant. He stressed upon the main sensors used for physical measurement which are: Differential pressure sensor, Temperature sensor, Flow sensors and level sensors. He then briefed upon on the PID controls used in the plant and the various modes of operation. Mr. Shetye elaborated on the entire DCS system of the plant. DCS is a set of programmable controllers which are shared by multiple controllers. This presentation was then followed by a DCS simulation of a section of the plant.

On **DAY 4**, Prof. Manjula Sutagundhar opened the session, by briefing the participants on

Programmable Logic Controller. Softwares like VersaPro and CX-One were used for PLC. Prof. Manjula gave an overview on the architecture of PLC, followed by detailed understanding of Normally Open (NO) and Normally Closed (NC) contacts. Hands-on exposure was given to the participants on ladder programming for combinational logic. Participants were also shown Hardware interfacing with the I/O devices. Ladder program implementation for latching and interlocking was introduced. The latching concept was explained using SET and RESET instructions as well. The next session was delivered by Prof. K. Bhat, who briefed the participants on Scada, and stressed the various components of a DAQ system, Types of signals, Common Transducers and signal conditioning, Signal grounding and measurements.

On **Day 5** the first session was conducted by Prof. Manjula Suthagundar, Assistant Professor, Department of Electronics & Instrumentation Engg,. In her session she explained PLC programming with the help of examples using the CX programmer. She stressed upon programming with timer and counter instructions to generate delays. She gave a hands on experience on interfacing with the programs with the PLC kit.

Session 2 was conducted by Prof. Bhat. In this session, he demonstrated real time examples with a conveyer belt and proximity sensor using PLC. Following his session on PLC programming, he briefed the participants on SCADA, different types of SCADA systems like traditional and local control using DCS. He also elaborated on the different types of industrial busses, requirement busses, variable frequency drive [VFD] and classes of VFD.

The post noon session was conducted by Mr. Nilkanth Pai Panandiker, Joint General Manager –Maintenance, Zuari Agro Chemicals Ltd. In this session he stressed upon the importance of safety in industry environment. He explained the different areas of automation in vehicles, process industry, power transmission, pipeline systems. He briefed upon some of the projects relating to automation at Zuari Industry.



The 5 day STTP ended with a Valedictory function. The Chief Guest of the function was Mr. Nilkanth Pai Panandiker. The report of the workshop was read by Prof. Selvyn Fernandes, Program coordinator. Following the presentation of the report, the Chief Guest addressed the gathering. In his address, he encouraged the audience to learn all through ones life. He stressed that there has to be an institute industry interaction to improve the quality of engineers and to make learning more enjoyable. He invited the faculty to have an interaction with industry and use it as a feedback tor quality education. The certificates and mementoes were distributed to the participants by Mr. Nilkanth Pai Panandiker, Rev. Fr. Kinley D'Cruz and Asst. Prof. Michelle Araujo e Viegas. Around 4 participants gave a feedback on the course. In the feedback, they congratulated the Electronics and Telecommunication Engineering Department for the team work and for organizing the program very efficiently. They urged the organizers to conduct more such courses and workshops in the near future. The vote of thanks was delivered by Asst. Prof. Kimberly Morais, program coordinator. The valedictory function was compered by Asst. Prof. Samantha Cardoso.

52 participants attended the workshop from different institutes. The participants were from the following colleges: Agnel Polytechnic, Verna, Padre Conceicao College of Engg., Verna, Goa Engg. College, Farmagudi, Govt. Polytechnic, Pnajim, SRIEIT, Shiroda, Institute of Ship Building Technology, Vasco, St. Xaviers, Mapuca, Govt. Polytechnic, Curchorem, Don Bosco Colledge of Engg, Lupin ltd., Agnel Institite of Technical education, Assagao. Vimal Jyothi Engg. College, Kerala.

## INHOUSE TRAINING FOR B.E. ETC

To fulfil the Industry goals and requirements the Department of Electronics and Telecommunication Engineering in association with DBEATS conducted a one week workshop from 6<sup>th</sup> January to 11<sup>th</sup> January 2017. The schedule of the topics covered were "Schematic and Layout using OSCAD" on the 9<sup>th</sup> and 10<sup>th</sup> January, 2017, "Project Report Writing" in the morning session of 11<sup>th</sup> January, 2017 and "Digital Image Processing: Practical Approach with examples in MATLAB" on 11<sup>th</sup> of January, 2017 in the afternoon session and on the 12<sup>th</sup> and 13<sup>th</sup> January, 2017 for the final year students of B.E. ETC.

### "SCHEMATIC AND LAYOUT USING OSCAD"

**Day 1:** The workshop started with an introductory and interactive talk on "PCB Design". The resource person for the workshop was Asst. Prof. Flavia Leitao, faculty of the ETC Department.

The following topics were covered on day 1:

- Brief overview of PCB Design and an insight on Multilayer PCBs.
- Knowledge of component Packages and different techniques of making a clean PCB.
- Overview of OSCAD Software.
- Drawing of Schematic in OSCAD, and Netlist generation.
- Mapping of footprint in OSCAD.
- Drawing the layout in OSCAD.

The circuit implemented on the PCB was an "Astable Multivibrator". Firstly the students were given brief explanation on the different stages involved in PCB designing using power point presentation.

The Students were given a brief understanding of the different packages (TO-92, TO-220, etc) and also the different types of parts (through holes and Surface mount) along with the soldering methods (wave soldering and reflow soldering) for the same.

Hands-on training on OSCAD was provided, exposing them to the different OSCAD editors like Schematic editor, Analysis inserter, Netlist Converter, Ngspice, Footprint editor, Layout editor, SMCSim, Model builder and Subcircuit builder.



The students were then trained to draw the Schematic in Schematic editor, Generate Netlist, Map footprints in Footprint editor and finally draw the Layout in Layout editor.

**Day 2:** The following topics were covered on day 2:

- Testing the circuit on breadboard
- Transferring the Layout from OSCAD onto the PCB
- Masking to remove the unwanted copper
- Etching
- Drilling and mounting of components
- Soldering
- Testing.

The students had a hands-on experience in designing the PCB. The coordinators for the workshop were Asst. Prof. Flavia Leitao and Asst. Prof. Mathilda Colaco.

The students showed great zeal and enthusiasm in designing the PCB. The workshop was a fruitful and a very successful event.

## “Project Report Writing”

### Day 3 - Morning Session

On the 11<sup>th</sup> of January, during the morning session, Prof. D. S. Vidhya guided the students on how to write a final year project report. The following topics were covered during the session: Introduction, Literature survey, overview of the project, results and discussion, conclusion and future work. The tools that could be used for project report writing were also introduced.

### “Digital Image Processing: Practical Approach with examples in MATLAB”

**Day 3- Afternoon Session:** The workshop commenced on 11<sup>th</sup> January in the afternoon session

at the Signal Processing Lab. It started with a technical session on 'Introduction to Digital Image Processing', by Asst. Prof. Deron Rodrigues. Besides providing basic information and state of art examples of digital image processing, he introduced the key stages in digital image processing i.e. Image Acquisition, Image Enhancement, Image Restoration, Morphological Processing, Segmentation, Object Recognition, Representation & Description, Image Compression and Colour Image Processing.

**Day 4:** Fourth day began with a hands on session on fundamental modules and tools of MATLAB used for Digital Image Processing. Asst. Prof. Deron Rodrigues explained the Basic Import and Export commands, Scientific File Formats, Image Types and classes and commands to convert between the image types, such as RGB (truecolor), binary, grayscale, and indexed and commands to display and explore images. MATLAB programs to Import, Export, and Convert Image class and types were implemented. This was followed by MATLAB codes to implement Image Arithmetic, ie. Addition, subtraction, multiplication, and division of images. Basic Image Transforms used in Image processing, Basic Geometric Transformations which include cropping, resizing and rotating images were covered.

The post lunch session was on 'Image Enhancement' delivered by Asst. Prof. Vishnu Rathod, which consisted of Contrast adjustment, histograms and histogram equalization and other image enhancement tools. This was followed by 'Image Restoration' were various image restoration techniques were covered. MATLAB codes for creation of blurred images, de-blurring of images, creation of noise images and de-noising of images were implemented.

**Day 5:** On the last day Asst. Prof. Vishnu Rathod explained 'Video Processing' which included implementation of codes to display a video clip (live video and recorded) in MATLAB, acquiring frames from video. This was followed by a session conducted by Asst. Prof. Deron Rodrigues on Morphological Filtering which included Dilation, erosion, reconstruction, and other morphological operations. Skeletonization and Perimeter determination- two

common image processing operations based on dilation and erosion were covered. Thereafter the session on 'Image Analysis', covered Object Analysis: Detection of edges, corners and Tracing Object Boundaries in an Image.

The workshop was coordinated by Asst. Prof. Deron Rodrigues and Asst. Prof. Vishnu Rathod.

## **TWO WEEK ISTE STTP ON CMOS, MIXED SIGNAL AND RADIO FREQUENCY VLSI DESIGN**

Asst. Prof. D.S. Vidhya and Asst. Prof. Deron Rodrigues, from the ETC Department attended a two Week ISTE STTP on “CMOS, Mixed Signal and Radio Frequency VLSI Design”, organized by IIT Kharagpur under the NMEICT initiative of Blended MOOCs (Massive Open Online Courses) model.

The equivalent of two-week full time work was spread over 6 physical weeks where video lectures and assignments were uploaded and the participants were required to submit the assignments by due date. The participants assembled at Remote Center, Goa Engineering College for 6 days from 30<sup>th</sup> January to 4<sup>th</sup> February, 2017 for face to face interaction and lecture sessions through A-VIEW.

First day began with inaugural ceremony followed by session on Introduction to RFIC Design. The Post lunch session was on basic Analog VLSI Design, by Prof. Mrigank Sharad, followed by Specifications for Analog Fractional.

Sessions on the second day by Prof. Indrajit Chakrabarti covered the topics Basic Digital VLSI Design and Low Power Signal Processing Circuits.

Day three commenced with session on Frontend Amplifier Design and Analysis, followed by session on design of Filters and ADC by Prof. Mrigank Sharad. Post lunch sessions for the day on Introduction to RFIC Design and Basic Receiver-Transmitter were delivered by Prof. T K Bhattacharya.

Fourth day consisted of session on Motion Estimation Architecture by Prof. Indrajit Chakrabarti, sessions on Low Noise Amplifiers, Mixer and VCO

Design by Prof. T K Bhattacharya.

Design of Power Amplifiers and Frequency synthesizers was covered by Prof. T K Bhattacharya on the fifth day. So also a quiz on the topics covered was held.

Last day consisted of sessions on RFIC Layout and RF System Level Simulation and Analysis Prof. T K Bhattacharya. The course concluded with feedback from all remote centers and valedictory function.

## **COMPUTER ENGINEERING DEPARTMENT**

### **T.E. COMPUTER STUDENTS ATTEND “RECENT TRENDS IN B.E. PROJECTS” SEMINAR**

The students of Third Year computer attended a seminar on “RECENT TRENDS IN B.E. PROJECTS” organized by C-CODES (Computer students association) on 28<sup>th</sup> January 2017 from 12 p.m. to 1 pm. The speakers for the seminar were Asst. Prof. Merwyn D'Souza and Asst. Prof. Kiran Waghmare.

The session initiated with the focus on selecting a project topic for the final year project. The speakers mentioned about the importance of selecting the right project idea, number of project group members required for each project and how to select the project guides. It was also informed that the B.E. project could be undertaken based on any subject in the Computer Engineering Program.

In the next part of the session, sample formats of Project Synopsis and Project Report were shown and



explained. The students were then informed about the project assessment scheme and SDLC (Software Development Life Cycle) for the 7<sup>th</sup> and 8<sup>th</sup> semesters. It was followed by videos and slides on various current B.E. project areas like Image Processing, Data Mining, Cryptography And Internet of Things.

The session concluded with an interactive question and answer session wherein the students had questions such as: Where to find good project ideas? Which institutes or companies provide projects? When and who finalizes B.E. projects? How are project guides assigned?

The coordinator for the seminar was Asst. Prof. Merwyn D'Souza – C-CODES staff coordinator.

## WORKSHOP ON BLENDER



Workshop on Blender was conducted for the Second year Computer Engineering students on 28<sup>th</sup> January 2017, from 3:00 to 5:00 pm. Blender is the free and open source 3D creation suite. It supports the entirety of the 3D pipeline-Fast modeling, rigging, animation, simulation, Photo realistic rendering, compositing and motion tracking, even video editing, game creation, realistic Materials, Fast Rigging, Animation Toolset, Sculpting, Fast UV unwrapping, Camera and object tracking.

31 students registered and participated in the course. The course was organized by C-Codes and coordinated by Asst. Prof. Norman Dias & Asst. Prof. Merwyn D'Souza, Co-Coordinator were Asst. Prof. Ankit Tiwari & Asst. Prof. Siya Naik along with the Spoken Tutorial Team - promoted by IIT Bombay.

Spoken Tutorial is association with Ministry of Human Resource Development (MHRD) as part of its Mission for Education - Information and Communications Technology (ICT).

The Students response to the online course was positive as they found that this distance education method is highly conducive to self learning

## B.E. COMPUTER INTERNSHIP WORKSHOP

As part of Internship Program a certificate course on Drupal was conducted for the Final year Computer Engineering students from 2<sup>nd</sup> January to 13<sup>th</sup> January 2017 from 9:00 am to 5:00 pm.

Drupal is a content management software. It is used to make many of the websites and applications used every day. Drupal has great standard features, like easy content authoring, reliable performance, and excellent security. But what sets it apart is its flexibility and modularity is one of its core principles. Its tools help to build the versatile, structured content that dynamic web experiences need.

64 students registered and participated in the course. The course was organized and coordinated by Asst. Prof. Norman Dias along with the Spoken Tutorial Team - promoted by IIT Bombay and Asst. Prof. Merwyn D'Souza – C-Codes staff coordinator.

Spoken Tutorial is an association with Ministry of Human Resource Development (MHRD) as part of its Mission for Education - Information and Communications Technology (ICT).

The Students response to the online course was positive as they found that this distance education method is highly conducive to self learning

## S.E. AND T.E. COMPUTER STUDENTS ATTEND SEMINAR ON MICROSOFT TECHNOLOGY

S.E. and T.E. Computer students attended a seminar on Microsoft Technology on Saturday, 28th January 2017 from 2 pm to 3 pm organized by C-Codes (Computer students association). It was conducted

by members of the Microsoft Developers Community, Goa. It was attended by around 55 students.

The presentation began with a brief overview of Microsoft and Microsoft products by Mr. Amit. He stressed the importance of having sound knowledge of Microsoft related programming languages and compilers like C# and Microsoft Visual Studio. He presented a short video on Hololens, the latest virtual reality technology developed by Microsoft. He then spoke about Microsoft's search engine 'Bing,' stating that leading companies like Facebook and Apple's Siri use Bing as their default search engine.



Mr. Vibhav, later spoke on the features of the latest version of Microsoft Visual Studio 2015. He encouraged the students to upgrade their version of Windows to Microsoft's latest version of Windows 10. He also briefed the students about Xamarin, an interesting feature of Visual Studio 2015 that allows the programmer to develop Android apps using C#.

The floor was then thrown open for queries and doubts from the students. It was truly an enlightening experience for the students attending the seminar. Asst. Prof. Merwyn D'Souza was the coordinator for the seminar.

## TEQIP II ISTE STTP ON "IoT WITH CLOUD"

A one week TEQIP II ISTE STTP on "IOT with cloud" was organized by the Computer Engineering Department in association with the SDM College of Engineering, Dharwad, Karnataka from January 2<sup>nd</sup> to 6<sup>th</sup> January 2017.

The workshop commenced on 2<sup>nd</sup> January 2017, with an inaugural ceremony in the distinguished presence of Dr. J D Pujari, Head of Department of Information Sciences, SDMCOE who was the Chief Guest for the occasion. The other guests present on the occasion were, Director of Don Bosco College of Engineering- Rev. Fr. Kinley D'Cruz, Principal of Don Bosco College of Engineering- Dr. Neena Panandikar, Head of Department of Computer Engineering - Asst. Prof. Gaurang Patkar and Coordinator of workshop - Asst. Prof. Amrita Naik.

Asst. Prof. Amrita Naik formally welcomed all the dignitaries and participants to the workshop. She also introduced the topic and explained the need to know about the technologies that is used for automation and also briefed the participants on the schedule of the workshop. Dr. Neena Panandikar thanked the Chief Guest for participating in the function. She also appreciated the Computer Engineering Department for putting in efforts to organize the workshop. Rev. Fr. Kinley D'Cruz addressed the gathering and spoke on the importance of maintaining individual identity and being you despite the pressures of the world. Prof. J D Pujari, addressed the gathering and stressed that everyone needs to believe in the spirit of going ahead, spirit of believing in oneself and learning new technology.

The vote of thanks was proposed by Asst. Prof. Gaurang Patkar. The inaugural function was compered by Asst. Prof. Christina Barretto.

On the first day, Prof. Dastikop introduced Cloud Computing, IoT and Aadhaar APIs. The participants tried hands-on: Google Forms, Quizzes, Spread-Sheets with SQL Queries, Google Documents with







editing in regional language, Google Slides, Google URL Shortener, Mind-Maps, Blogger and embedding all the above in Blogs, Google Groups and WhatsApp Groups.

On the second day, the participants made a simple calculator using HTML5 and Java Servlets in Eclipse and deployed it in Google App Engine using Google Cloud Console. Later, the participants made simple applications using MIT App Inventor. Then hands-on session was conducted on IBM BlueMix with PHP to make a simple calculator.

On the third day, the participants had a session on Virtualization by Prof. Pravin Hanchinal. Participants also worked with Google Maps APIs using JavaScript to make sample applications using Eclipse and Google App Engine. Knowledge of DigiLocker was shared. Hands-on sessions were conducted on Google Maps Java Script API and Aadhaar API (Demographic Authentication).

On the fourth day, sessions were conducted on IoT: Micro-controllers (Arduino), Sensors (LM35 and Ultrasonic sensors) and Modules (Bluetooth and Wifi). Participants tried basic LED blink on Arduino and worked with LM35 analog temperature sensor. The participants were then given a demonstration with LM35 controlled AC table fan using relay switch which will be on after crossing a pre-defined temperature value. The participants worked with Bluetooth module to control external led on Arduino followed by a demonstration on Bluetooth controlled (using ArduDroid app on Android) table fan.

On the last date, the hands-on sessions were on

Arduino with ESP8266 wifi module to take LM35 values to ThingSpeak. Later, a demonstration was given on Raspberry Pi 3 with Image Processing using openCV. Post lunch a talk on research trends on IoT and Cloud was given by Dr. S R Biradar.

The five day STTP ended with a Valedictory function. The Chief Guest for the function was Mr. Austin Colaco. The report of the workshop was presented and was followed by the address of the Chief Guest to the gathering. In his address, he encouraged the audience to organize and learn through workshops. The certificates and mementos were distributed to the participants by Mr. Austin Colaco, Rev. Fr. Kinley D'Cruz and Asst. Prof. Gaurang Patkar. The vote of thanks was delivered by Asst. Prof. Amrita Naik. The valedictory function was compered by Asst. Prof. Lilavati Samant. 40 participants attended the workshop from different institutes. The participants were from the following colleges: KLE- Belgaum, SDM-Dharwad, Agnel Polytechnic -Verna, Padre Conceicao College of Engg-Verna, Goa Engg. College-Farmagudi, Govt. Polytechnic- Panjim, SRIEIT-Shiroda, Govt. Polytechnic- Panjim, Goa Multifaculty College-Dharbandora, Damodar College -Margao. Also our Financial partners for the workshop were Bank of India-Fatorda, Info Tech Corp of Goa Ltd-Panjim, Raj Housing Pvt Ltd, Corporation bank-Navelim, Navelkar Hotels.

## PAPER PUBLICATIONS

International Journal of Pharmacy & Technology,  
Impact factor:0.13

Research Article Title: PALM OIL FRUIT-AUTOMATED GRADING USING IMAGE PROCESSING AND FUZZY LOGIC TECHNIQUES:AN IMPRESSION AND SURVEY  
Author: Gaurang S Patkar, ISSN: 0975-766X, Dec-2016 ,Vol. 8, Issue No.4, pp 21835-21846

Asst. Prof. Gaurang Patkar published a research article titled' PALM OIL FRUIT -AUTOMATED GRADING USING IMAGE PROCESSING AND FUZZY LOGIC TECHNIQUES: AN IMPRESSION AND SURVEY', in the International Journal of Pharmacy & Technology.

## SCIENCE AND HUMANITIES

### ELOCUTION COMPETITION

DBCE, Fatorda hosted the Konkan Railway Corporation Ltd. to celebrate the Vigilance Awareness Week on 2<sup>nd</sup> November 2016. This event was organized keeping in mind the guidelines of the Central Vigilance Commission. An elocution competition with the central theme of Vigilance Awareness was organized as part of the event. The chief guests for the function were Mr. Manjunath G. Kshetrapal, Senior Regional Mechanical Engineer and Mr. Baban Ghatge, Deputy General Manager (PR). Director Fr. Kinley D'Cruz and Principal Dr. Neena Panandikar were also present.

The first prize was bagged by Mr. Vivek Kumar while the second prize was won by Mr. Joshua Sapeco. The competition was judged by Asst. Prof. Roseline Fernandes and Ms. Grebiana Alemao. The students enthusiastically participated and attended the event.

### SEEDS EVENT

The event began at 9:30 a.m on 29<sup>th</sup> January 2017 with a 'Talk on Relationships' by Mrs. Nirmala Rebello, the Head Councilor of Carmel Higher Secondary School, Nuvem. She spoke to students about various types of relationships which were relevant to the age group of the students. The students also took the opportunity to put forth their doubts and views before the esteemed speaker. She concluded her talk with a short which enabled the students to check whether they are in a healthy relationship or not.

After the 'Talk on Relationships' a Meditation session



was held by Ms. Dikshita Desai and Ms. Subrada Zambaulikar. The students were briefed on various methods of meditation and also shown how to relax and calm their minds. They were given a few simple exercises to attain a healthy lifestyle.

The students prepped up for the Flameless Healthy Cooking Competition while the Intra-Class Quiz Competition was being conducted.

Post lunch, the judges went around to taste the dishes presented by the students and declared F.E. Computers the winners.

The Inter Class Quiz Competition commenced which was based on the theme "Health and Fitness", in which F.E. ETC managed to win the competition. The four classes then presented skits on the topic, 'Empowering Youth and Future Voters'. The competition for the same was held on the 14<sup>th</sup> January, 2017 which the F.E. ETC won.

The event concluded at 4:15 p.m. with the unveiling of the SEEDS Rolling Trophy which will be awarded to the class with the highest points at the end of the semester.

## TPO

### TRAINING ON NATIONAL WEB PORTAL

The Board of Apprenticeship Training (BOAT) (WR), Mumbai in association with The Training and Placement Office organized training on National Web Portal on 21<sup>st</sup> December 2016. The Ministry of Human Resource Development, Department of Higher Education, Government of India has developed a National Portal [www.mhrdnats.gov.in](http://www.mhrdnats.gov.in) for effective implementation of the Apprenticeship Training Scheme by offering online facilities for all the stakeholders. Hence, an invitation was extended to all the industries and institutes to inform them about the use of the portal. The training was conducted for the industry professionals in the morning. 105 HR professionals from across the state of Goa attended the programme. Director, Fr. Kinley D'Cruz delivered the welcome address followed by the presentation on the portal by Mr. N. N. Wadode, Deputy Director,



Board of Apprenticeship Training (WR), Mumbai. While discussing the issues affecting the implementation of the apprenticeship scheme in Goa, Mr. Wadode highlighted that more than 1000 apprentice seats remain vacant for lack of students even though they find that there are more than the required number of students passing out each year. Mr. Ronald Dcunha, General Manager- HR, Finolex Cables and Mr. Anil Gole, General Manager- HR Duraline were special invitees who spoke about how the apprentice scheme has helped them in their respective industries. Asst. Prof. Vaishali Parakhi proposed the vote of thanks.

In the afternoon, training was conducted for principals and placement officers of engineering colleges, polytechnics and vocational schools. 30 participants were present. Director, Fr. Kinley D'Cruz delivered the welcome address followed by the presentation on the portal by Mr. N. N. Wadode, Deputy Director, Board of Apprenticeship Training (WR), Mumbai. Mr. L.R. Fernandes, Principal, govt. Polytechnic, Panjim who is also on the Board of Governor, BOAT spoke about the tremendous work done by BOAT and how it can benefit the institutes in Goa. Prof. Vaishali Parakhi proposed the vote of thanks.

Asst. Prof. Mathilda Colaco compered the event. The event was coordinated by Asst. Prof. Roseline Fernandes, Assistant Training and Placement Officer

1. HFCL conducted online aptitude test on 26<sup>th</sup> November 2017. Final year ETC students of PCCE, AITD and SRIET attended the drive.
2. OS3 Technologies, Mumbai conducted a campus drive on 8<sup>th</sup> December 2017 for final year Computer students.

## NSS

### NSS SPECIAL CAMP

The NSS unit of Don Bosco College of Engineering had its annual Special Camp from 17<sup>th</sup> January 2017 to 21<sup>st</sup> January 2017 at Don Bosco Vocational Training Institute (DBVTI), Quepem. Forty-one (41) NSS volunteers including 6 girls attended the camp. The volunteers were accompanied by staff members Asst. Prof. Harison Cota (NSS Programme Officer), Dr. Avertano Barreto (Sports Officer) and lady staff Asst. Prof. Matilda Colaco (ETC Department).

The work undertaken was: cutting of wild grass and making of pathway lined with painted stones, beautification of area around Don Bosco statue. The volunteers were given an interactive session on general first-aid with live demonstration by Dr. Trudy Furtado. The camp also involved a hiking experience to the "Parvath" at Paroda. The volunteers presented a cultural programme consisting of a moral based skit, songs medley, dance performances and comedy skits by the staff. The cultural programme was attended by Fr. Kinley D'Cruz (Director, DBCE), Fr. Julius Rasquinha (Administrator, DBCE), Fr. Marvin Vaz, (Youth Animator, DBCE), Fr. Michael D'Costa (Director, DBVTI) and other Priests from Don Bosco, Quepem as well as some local villagers from Quepem. The cultural programme was followed by dinner and camp-fire.

On reaching the camp-site on 17<sup>th</sup> January, the volunteers were welcomed and addressed by the director of DBVTI Fr. Michael D'Costa who was very helpful and provided all the necessary facilities to make the camping experience very fruitful.





Every day began with waking-up at 6am followed by a short prayer, warm-up exercises and games at 7.30am.

Each day's work began at 9am after having a good breakfast. The volunteers worked for three sessions of one and half hour each with either a tea break or lunch break in between. They worked in five groups consisting of nine members each with each group assigned a different task which they did very enthusiastically. After freshening-up, the evening time was given to practice for the cultural programme. This was followed by dinner at 8.00pm. The day ended with lights-off at 10.30pm.

## CULTURAL

The Republic Day was celebrated at Don Bosco College of Engineering, Fatorda on the 26<sup>th</sup> of January 2017. It began at 8:45 am with the esteemed Chief Guest Mr. Olavo Carvalho, unfurling the National Flag.

The winners of the skit competition of the voters day performed the skit.

The Rector, Fr. Paul D'Souza addressed the gathering with an



inspirational speech. The Chief Guest Mr. Olavo Carvalho gave a motivating speech. A floral tribute was presented to the Chief Guest by the Director, Rev. Fr. Kinley D'Cruz.

The function ended with a Vote of Thanks given by first year student Mr Reuben Gouveia. The function was compered by a first year Civil student Miss Subrata Rai.

The first year students Martires Rohit Edward, Pharakate Sheetal Shivaji, Bale Shaunak Kautuk, Bhagat Raviraj Ranu, Colaco Sherwin Arnald, Da Silva Amish, Desai Gautam Kishor, Desai Siddhi Rajeev, Faldesai Ashwin Devappa, Keith Prazeres Pinto, Monteiro Swizel Rosann, Pharakate Sheetal Shivaji, Sayed Saif Ahmed Siraj Ahmed, Shanbhag Neha from F.E. ETC and Yash Ajgeonkar F.E. Civil won the First Place in skit Competition topic being Ethical Voting and Awareness at the Margao Municipal Council Hall, 7<sup>th</sup> national voter's day held at 2:30pm.

## STAFF ACHIEVEMENT

Mr. Avertano Barreto, Sport Officer has completed his Ph.D in Physical Education from Bombay University.



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