NIKSHEP NEWS 2016-17

CIVIATION- 2016-17

Every year Department of civil engineering conducting various different technical talks and guest lecturers from resource persons and delegates from reputed engineering colleges & also from Industrial background.

Details of Technical talks conducted in the year 2016-2017

Sl.No	Date	Resource Person	Topic
01	22nd Aug 2016	Mr. Ravishankar M	*Ready mixed Concrete Scenario in India*
02	28th September 2016	Eng. Suraj Kumar	*cement manufacturing process and good construction practices*
03	28th September 2016	Eng. ArunPrabha K.S	parallel construction techniques
04	8th Oct 2016	Dr. V. Ramachandra	Challenges and Opportunities for Civil Engineering and Next Generation Concrete
05	19th Oct 2016	Mr. D.B Mehta	*Civil Engineer and Entrepreneur*
06	15th Feb 2017	Eng. ArunPrabha K.S	*Suspension Foot Bridges for Rural Development*
07	17th March 2017	PADMASHRI B. GIRISH BHARADWAJ	*Healthy Constructions :Can This Be a Reality ?*
08	20th March 2017	Anil V. BaligaManjeshwar	*COPING WITH WATER SCARCITY*
09	20th March 2017	Dr. M.K.NAGARAJ	*World water day-2017*
10	27th March 2017	Dr. H LAKSHMIKANTHA	*Overview of steel – Concrete composite construction*
11	26th April 2017	D.S.ANJANEYA MURTHY	*Suspension Foot Bridges for Rural Development*

A technical talk on **"Challenges and Opportunities for Civil Engineering and Next Generation Concrete"**presented by the resource person.

There are a diverse and increasing range of areas, fields, disciplines, branches or specialities of engineering. These developed from civil, mechanical, chemical, electrical and electronic engineering, as knowledge developed and differentiated as subjects subdivided, merged or new subjects arose. The emergence of new branches of engineering is usually indicated by the establishment of new university departments, new professional engineering organizations or new sections in existing organizations**.**

About Next generation concrete, explained beautifully how the concrete can make use as ornamentals and polished concrete used as tiles for flooring and for good aesthetic view. This talk explained lot of things about concrete I.e., Next generation concrete.

A technical talk on "World water day-2017"presented by Dr. H LAKSHMIKANTHA, Regional Officer,Karnataka State Pollution Control Board,Udupi.

World Water Day is an annual event celebrated on 22 March. The day focuses attention on the importance of universal access to clean water, sanitation and hygiene facilities in developing countries The day also focuses on advocating for the sustainable management of freshwater resources. In 2017, the theme is "Why Waste Water?" which is about reducing and reusing wastewater. The theme is a play on words as it relates to both: the aspect of wasting water and issues around wastewater, namely treatment and reuse. Wastewater is a valuable resource to help achieve the Sustainable Development Goal Number 6. One aspect of Target 6.3 is to halve the proportion of untreated wastewater and also to increase the recycling and safe reuse of water across the globe.

Technical Talk by Dr. V RAmachandra , Head (Tech Services), UltraTech Cement Ltd.,Mumbai.

Er. ARUN PRABHA K S- CEO sky cell Towers

Padmashri B. Girish Bharadwaj

INDUSTRIAL VISIT

A 3 day Industrial Visit was organized for 7th Semester B.E 140 Students of Civil Engineering Department on 09-02-2017 to 11-02-2017 to visit
SUNVIK Steel Pvt. Ltd. Jodidevanahalli Kallambella Hobli, sira taluk Tumkur Dist and Heidelbergcement India Limited Ammasandra, Tumkur.

A 3 day Industrial Visit was organized of 6 th sem students regarding the Subject Hydralic Structures from to in around Shanthisagara, Davanagere and Chitradurga. **Faculties** accompanied the students for the industrial visit


Tower head, Shatisagara


Aquadact, Shatisagara

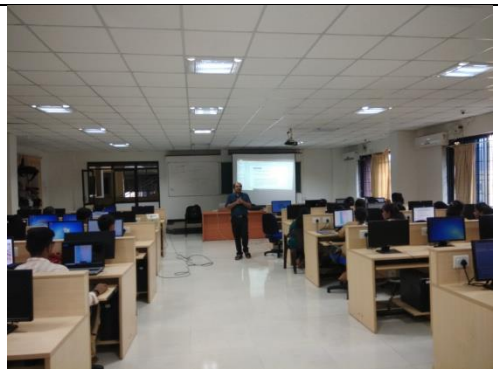

Cross regulator


Vanivilas dam

PLACEMENT ACTIVITIES

Academic Year 2016 – 17 – On Campus

Academic Year 2016 – 17 – Off Campus

 Dr JAGADEESHA PAI	 B GOVINDA RAMESH
 GROUP DISCUSSION AT PLACEMENT ACTIVITY	 **PLACEMENT TRAINING BY MAJOR RADHAKRISHNA**

PUBLICATIONS BY FACULTIES

Our department faculties have published different technical papers in National, International Journals & technical conferences.

CONFERENCES BY FACULTIES

WORKSHOP AND TRANING PROGRAM

A BRIEF REPORT ON 5 DAYS STATE LEVEL WORKSHOP

ON

DESIGN, CONSTRUCTION & FABRICATION OF STEEL STRUCTURES

The Civil Engineering Department of Alva's Institute of Engineering & Technology, Mijar, organized **5 DAYS STATE LEVEL WORKSHOP** on "**DESIGN, CONSTRUCTION AND FABRICATION OF STEEL STRUCTURES**" from **30/1/2017** to **03/02/2017** from various eminent personalities.

Programme Proceedings :

The inauguration began at 08:30 A.M. The gathering was cordially welcomed by Dr. Umeshchandra (Associate Professor). The function began by seeking the blessings from god by a song by Nidhi Bhat (6th semester). The lightening of the lamp was done by chief guests, our beloved Principal, Head of the Department. Later Dr. Nitendra Palankar (Sr.Associate Professor) of Civil Engineering Department introduced the chief guest Dr. Jayanta K Saha, DGM, INSDAG, Kolkota and Mr. Adhitya tantri (assistant professor) of civil engineering introduced Mr. Sumanta Mandal, RINL, Vishakhapatnam. Dr. Peter Fernandes, Principal, AIET was president over the function.

DAY-1: (30-01-2017)

Technical Talk by Sumanta Mandal on Making, Shaping, Treating of steel: (9;00 am to 10:30 am) & long steel products: (12:10 pm to 1:40 pm).

A technical talk on **"Making, Shaping, Treating of Steel"** presented by the resource person.

There are a diverse and increasing range of areas, fields, disciplines, branches or specialties of engineering. These developed from civil, mechanical, chemical, electrical and electronic engineering, as knowledge developed as subjects subdivided, merged or new subjects arose. The emergence of new branches of engineering is usually indicated by the establishment of new university departments, new professional engineering organizations or new sections in existing organizations**.**

Though steel is a very vast subject it was beautifully explained about its making, shaping and treating of steel.

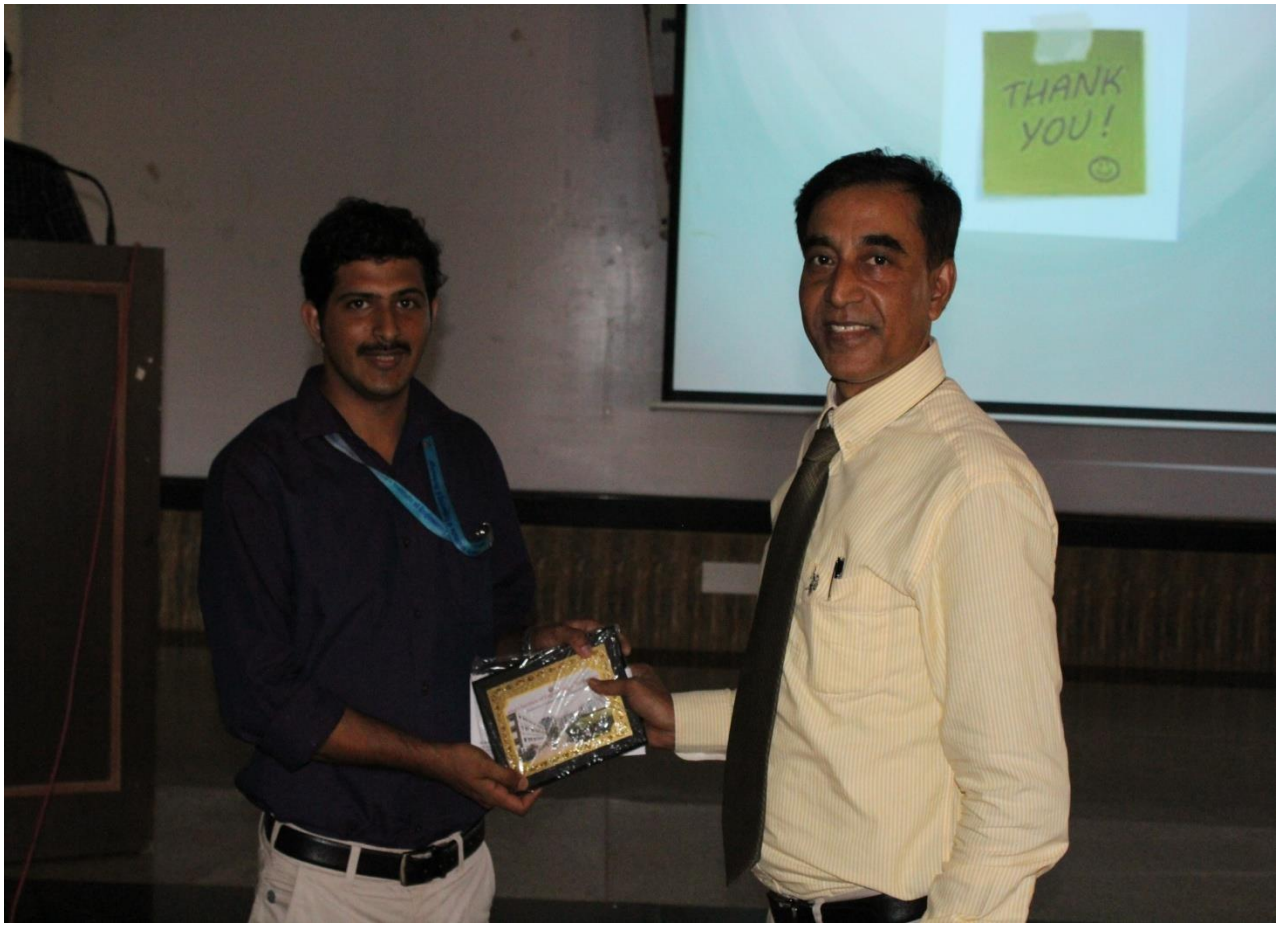
He gave a detailed idea about the long steel products their availability, standards, techniques to use them, their specifications and case studies on long steel products. He also explained about their uses in construction industries and in capital goods sector. With these topics he shared with us a very good knowledge of long steel products which will help us in our future work places.

Technical Talk by Dr. Jayanta K Saha about welding of steel: (10:40 am to12:10 pm), corrosion protection of steel (2:10 pm to 3:40 pm) & passive fire protection of steel structures (3:50pm to 5:20pm)

Dr. Jayanta K Saha explained us all about the selection of right welding process, knowledge in weldment design, selection of materials of weldment, knowledge of welding machines, understanding metallurgical factors, testing techniques for sound weld, welding procedure specification, fabrication and the knowledge of standards: AWS, IS 800. All these concepts were explained wonderfully and conveyed in detail.

He also briefed out about the corrosion protection of steel concept, techniques to overcome this, specifications used in this and the case study about corrosion

At the end of the day 1 he explained about the Passive fire protection of steel structures their types, selection, products and case study about passive fire protection.



DAY-2: (31-01-2017)

Technical Talk by Mr. Mitra B Dutta on Benefits of building information modeling through trimble solution (11:40 am to 1:10 pm).

Mr. Mitra B Dutta gave a brief introduction about the most advanced BIM software through trimble solutions. He also explained about the difference between the BIM and virtual construction which was indeed a very useful topic which will assist us in future. He also briefed out about the tremble solutions which is one of the most advanced technology used in the construction projects by which we can build multi storied buildings with ease and no difficulties.

Technical Talk by Mr.Chandrashekar on Benefits of building information modeling workflow and automation (1:50 pm to5:00 pm)

Here in this session we got much practical knowledge about the BIM software its usage and the procedure to get a license for the software which served us the most useful indeed the session was much interesting as it was more a kind of practical session. The step by step procedure of the tekla software was taught. Where **BIM** is a process for creating and managing all of the information on a project – before, during and after construction. The output of this process is the Building Information Model, the digital description of every aspect of the built asset. **Tekla Structures** is 3D building information modeling (BIM) software used in the building and construction industries for steel and concrete detailing, precast and cast in-situ. The software enables users to create and manage 3D structural models in concrete or steel, and guides them through the process from concept to fabrication.[9] The process of shop drawing creation is automated. Along with the creation of CNC-files, files for controlling reinforcement bending machines, controlling precast concrete manufacturing, importing in PLM-systems etc. Tekla Structures is available in different configurations and localized environments to suit different segment- and culture-specific needs.

DAY-3:(01-02-2017)

Technical Talk by Mr. Anjaneya Murthy on analysis & design of steel columns (9:00 am to 10:30 am) & Designing and detailing of base plates of columns (12:00 pm to 1:15 pm)

Mr. Anjaneya murthy explained about the function and purpose of column base plates are to provide a spread and distribution of column loads from the steel column to the weaker concrete footing. The base plate acts as an intermediate stress distributor in a similar way theconcrete footing distributes load from the footing to the softer soils below. When the column load contains a moment, the base plate may require design to ensure uplift of the base plate does not occur which is achieved by designing anchor bolts to resist the tensile

forces. Base plate design typically involves an iterative procedure to solve for unknowns which can be time consuming without a useful tool such as a formatted spreadsheet.

Technical Talk by Dr. P. Savoikar on connection designs bolted and welded (10:40 am to 12:00 pm) & Member design under tension, compression, flexure, combined forces (02:00 pm to 3:30 pm)

Dr. P. Savoikar gave a talk on joints in steel structures that is both welded as well as bolted joints. Most of the failures occur due to the improper joints. So it was indeed an interesting topic. He explained about the types of joints, classification, capacity, use, fixing mechanism and defects of the joints in steel structures. In recent days it is having more scope so that the failure can be avoided.

And he also explained us about the design of member when it is subjected to tension, compression, flexure and combined forces. The behavior of the member when it is subjected to various loads and the need for safe

design under various loads were explained clearly. The talk was indeed so much beneficial.

Technical Talk by Mr. Madhav kamath on analysis of open web truss members (3:40 pm to 5:10 pm)

Mr. Madhav kamath briefed out about the analysis of open truss members which are designed to provide architectural freedom for commercial and light industrial applications. He also explained about the various types of trusses and their applications and he gave a detailed account on open web truss members and their applications, Web trusses provide architectural freedom for commercial and light-industrial construction applications. Designed and built specifically for each job, they create efficient and economical floor and roof solutions.

DAY-4:(02-02-2017)

Technical Talk by Mr.Madhav kamath on design methodology for tubular structures (9:00 am to 10:30 am)

Mr. Madhav Kamath explained us about the tubular structures and their application ingeneral Buildings, Columns, roof Trusses ,purlins. Industrial Buildings ,Built–up columns,Column and Truss Frames, Portal frames ,Special structures ,Long span roofs, Arches, Domes, Sports-stadia roofs, Railway station structures ,Sign posts, Gantries, Lighting Towers, Transmission Towers, Oil drilling platforms. He also talked about the stability of the trusses under various loads. This talk was indeed very useful.

Technical Talk by Dr. Pradhyumna on introduction to steel structured design, fabrication & erection &introduction to software development for structural engineers (11:40 am- 1:20 pm)

Dr. Pradhyumna gave a talk on introduction to steel structured design, fabrication and erection.The steel-framed building derives most of its competitive advantage from the virtues of prefabricated components, which can be assembled speedily at site. Unlike concreting, which is usually a wet process conducted at site, steel is produced and subsequently fabricated within a controlled environment. This ensures high quality, manufacture offsite with improved precision and enhanced speed of construction at site. The efficiency of fabrication and erection in structural steelwork dictates the success of any project involving steel-intensive construction. Current practices of fabrication and erection of steel structures in India are generally antiquated and inefficient. **Most structural engineers use 3D integrated structural analysis and design software in their daily work. This software make modeling geometries of structures and analyzing loads much more efficient, therefore decreasing the time and effort needed for finite element analysis. Many of these software have integrated and diverse features, such as analyzing a diversified profile of structural elements (slabs, openings, foundations, columns, walls, bracings, beams, etc), modeling structures of different materials, checking for geometrical errors, and outputting analysis and graphical files. This talk gave us more updated knowledge on using software's in structural engineering.**

Technical Talk by Mr. Umesh B Rao structural design and structural detailing of truss bridge for pedestrians (02:00 pm to 05:00 pm)

Mr. Umesh B Rao explained about the structural design and detailing of truss bridge for pedestrians. This session was more of a practical one rather than too much practical. He explained about the design considerations,Application options for prefabricated steel truss pedestrian bridges, Terminology used to describe a prefabricated steel truss pedestrian bridge and Items to consider for proper layout of a trail bridge. This talk was so much motivating and it was indeed our pleasure to be a part of it.

Valedictory:

Prof. Rahasya K R (Assistant Professor) of Civil Engineering Department was the mistress of ceremony, the Guest & audience were welcomed by Prof. Nikhil N (Assistant Professor) of Civil Engineering Department Mr. Umesh B Rao was the chief guest & B Durgaprasad Baliga, Head of Civil Engineering Department was the president of valedictory. Feedbacks from the external participants and the students were taken. Mr.Umesh B Rao talked about the current status of civil engineering and also gave some of the valuable suggestions which was very helpful. Finally Vote of thanks was proposed by the Prof. Veena D Sawanth.


ALVA'S INSTITUTE OF ENGINEERING & TECH
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Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING
&
INSTITUTE FOR STEEL DEVELOPMENT & GROWTH (INSDAG),
Organises
A FIVE DAY STATE LEVEL WORKSHO
On
DESIGN, CONSTRUCTION &
FABRICATION OF STEEL STRUCTU
DATE: 30/01/2017 – 03/02/2017
VENUE: MBA SEMINA

DAY-5:

SITE VISIT BY ACCEI, MANGALURU:

Site visit was held in mangaluru by ACCEI. There we got to see the practical applications and problems that will arise in sites. We got to study about the Fly overs which were under construction and the topics regarding post tensioning. It was indeed a great experience.


S GENERATORS


Association of Consulting Civil Engineers (India)
MANGALORE CENTRE
IN ASSOCIATION WITH
Alva's Institute of Engineering & Technology
MOODBIDRI
TECHNICAL SITE VISIT
FOR THE DELEGATES OF
INSTITUTE OF STEEL DEVELOPMENT & GROWTH
(INSDAG), KOLKATTA
STRUCTURAL STEEL FLYOVER
PLACE : ACROSS NH - 66, KULURU, MANGALURU
Date : 03-02-2017 FRIDAY