

CONTOUR

ASSOCIATION OF CIVIL ENGINEERS, AJCE

The Association of Civil Engineers, AJCE, was formed under the guidance of Asst Prof. C.S. Belarmin Xavier. The following students were selected as the office bearers

Nithin Thomas Sam (4 Year Secretary)

Tony Thomas (3 Year Treasurer)

Amsha Shaji (2 Year Joint Secretary)

Leeya Don Koithara (2 Year Joint Secretary)



HOD

's Message

Sr. Claramma Rosary

Be Proud To Be A Civil Engineer

Civil engineering is the broadest of the engineering fields. Civil engineering focuses on the infrastructure of the world which include Water works, Sewers, Dams, Power Plants, Transmission Towers/Lines, Railroads, Highways, Bridges, Tunnels, Irrigation Canals, River Navigation, Shipping Canals, Traffic Control, Mass Transit, Airport Runways, Terminals, Industrial Plant Buildings, Skyscrapers, etc. Among the important subdivisions of the field are construction engineering, irrigation engineering, transportation engineering, soils and foundation engineering, geodetic engineering, hydraulic engineering, and coastal and ocean engineering.

Civil engineers build the world's infrastructure. In doing so, they quietly shape the history of nations around the world. Most people cannot imagine life without the many contributions of civil engineers to the public's health, safety and standard of living. Only by exploring civil engineering's influence in shaping the world we know today, can we creatively envision the progress of our tomorrows.

INAUGURATION OF

ICI STUDENT'S CHAPTER

The inaugural ceremony of ICI-Student's Chapter of Amal Jyothi College of Engineering was held on 7th September 2013. The Chief Guests for the event were Er. Shelly S. Fernandez, Chairman, ICI-Kochi Centre and Mr. Ravi Prakash, Manager Technical of RMC Ready Mix. Welcome speech was given by Mr. Belarmin Xavier C S, Asst. Professor, CE Dept.

Mr. Shelly S. Fernandez pointed out the faults and carelessness usually made by civil engineers, which led to the failure of the structure like Poonamchambers, Worli, Mumbai; Mandovi River Bridge etc., which led to loss of lives. He compared human life especially marital life to the building structures through his presentation.

Thereafter, Sr. Claramma Rosary, HOD, Department of Civil Engineering, unveiled the cover of the magazine titled, "Striders", which is expected to be published by the end of this semester.

Mr. Ravi Prakash took over the stage and spoke on readymix concrete. He touched upon different innovative architectural structures at different parts of the world such as Nehru Science Center in Mumbai, Lotus Temple, Delhi, Petronas Towers, Kuala Lumpur, Malaysia etc



Lighting the Lamp by Er. Shelly S. Fernandez



AZURE 2013

Azure is a three-day national level technocultural fest conducted every year, which provides a platform to the students of the engineering fraternity for exchange of ideas and information to keep themselves abreast of the current developments

The events organized by Civil Department were well appreciated by the organizers and external participants. The name of the department was held high throughout the fest, as a result of the unabated efforts of the students.

The Exhibition organized by the Final Year and Pre final year students with the support of the second year students was one of the beguiling events of the entire fest. The events like Master Builder, Survey Hunt and Building Drawing, which was restricted to the external participants earned appreciation, for their different style and presentation.



It was a day of jubilation for the faculty members of the Department of Civil Engineering on November 14, 2013, when they went for a jaunt to Thekaddy



NEWLY JOINED FACULTY

Department extended a hearty welcome to the newly joined faculty members Lisa Mary Thomas, Ria Jose, Megha Thomas, Sheetal Tom, George Mohan, Jose Joseph, Deepak John Peter, Naveen Joseph, Cini Philip, Vishnu B, Tina Abey, Jeena B Edayadil, Nirmal George and Linu Theresa Jose.

FDP ON CREATIVE TEACHING

Newly joined faculty members of the department attended an e-workshop on Creative Teaching, organized by Department of Computer Science Engineering in association with ISTE Kerala Chapter. All the participants were awarded a certificate by ISTE

HAPPY TEACHER'S DAY



Students of second year made September 5th, Teachers Day really special and a day of merriment for teachers by giving them lovely and unforgettable gifts and distributed sweets.



FAREWELL

Ansu Thomas, Libi P. Markose and Tissa Mathew, were relieved from the department last semester. Department as a whole is extremely thankful to them for their valuable services, commitment and dedication.

Good Luck for All the Journeys Of Your Life!

SUBJECT TOPPERS & CLASS TOPPERS IN UNIVERSITY EXAMS

SEMESTER: S1, S2-A

| SUBJECT | TOPPER NAME | MARKS (%) |
|--|------------------------------------|--------------|
| Engineering Mathematics I | Bella Rose Tom , Agnus Rachel Saji | 90.67 |
| Engineering Physics | Elizabeth Joseph | 92.67 |
| Engineering Chemistry and Environmental Studies | Bella Rose Tom , Aswathy Damodaran | 90 |
| Engineering Mechanics | Aswathy Damodaran | 84.67 |
| Engineering Graphics | Aayena K. Jolly | 90.67 |
| Basic Civil Engineering | Greeshma Raju | 91.33 |
| Basic Mechanical Engineering | Greeshma Raju | 88.67 |
| Basic Electrical Engineering | Bella Rose Tom | 90 |
| Basic Electronics Engineering and Information Technology | Aayena K. Jolly, Aswathy Damodaran | 77.33 |
| Mechanical Workshop | Anjana Jacob | 86 |
| Electrical and Civil Workshops | Abin C. Idicula | 87 |
| OVERALL TOPPER | Bella Rose Tom | 84.93 |

SEMESTER: S1S2 CE-B

| SUBJECT | TOPPER NAME | MARKS (%) |
|--|----------------------|--------------|
| Engineering Mathematics I | Leeya Don Koithara | 90.66 |
| Engineering Physics | Namitha M J | 90 |
| Engineering Chemistry And Environmental Studies | Roshini Elsa Mathew | 91.33 |
| Engineering Mechanics | Shaise K John | 86 |
| Engineering Graphics | Shaise K John | 92.66 |
| Basic Civil Engineering | Shaise K John | 88 |
| Basic Mechanical Engineering | Roshini Elsa Mathew | 82.66 |
| Basic Electrical Engineering | Sarath D | 89.33 |
| Basic Electronics Engineering And Information Technology | Shaise K John | 84.66 |
| Mechanical Workshop | | |
| Electrical And Civil Workshops | | |
| OVERALL TOPPER | Shaise K John | 85.86 |

SEMESTER: S4 CE-A

| SUBJECT | TOPPER NAME | MARKS(%) |
|--|--------------------------------|-------------|
| Engineering Mathematics III | Anu Susan Joseph, Akhila Jobie | 90.66 |
| Construction Engineering and Management | Amala Joseph | 80 |
| Mechanics of Solids II | Anu Susan Joseph | 81.33 |
| Open Channel Flow and Hydraulic Machines | Anu Susan Joseph | 93.33 |
| Surveying II | Anu Susan Joseph | 88 |
| Civil Engineering Drawing | Anjana Jose | 89.33 |
| Surveying Practical II | Anjana Jose | 86.66 |
| Hydraulics Lab | Anjana Jose | 79.33 |
| OVERALL TOPPER | Anu Susan Joseph | 9.07 |

SEMESTER: S4 CE-B

| SUBJECT | TOPPER NAME | MARKS (%) |
|--|--------------------------|-------------|
| Engineering Mathematics III | Reshma Thankachan | 97.3 |
| Construction Engineering and Management | Reshma Thankachan | 84 |
| Mechanics of Solids II | Reshma Thankachan | 84.67 |
| Open Channel Flow and Hydraulic Machines | Reshma Thankachan | 91.33 |
| Surveying II | Reshma Thankachan | 91.33 |
| Civil Engineering Drawing | Reshma Thankachan | 94 |
| Surveying Practical II | Nivea Thomas | 88.66 |
| Hydraulics Lab | Nivea Thomas | 84.67 |
| OVERALL TOPPER | Reshma Thankachan | 87.8 |

SEMESTER: S6 CE B

| SUBJECT | TOPPER NAME | MARKS (%) |
|--|-----------------------------|-------------|
| Design of Steel Structures | Tony Chackochan | 74.7 |
| Geotechnical engineering II | Sherry Rose Jose | 90.7 |
| Structural analysis II | Sandra Maria Cherian | 83.3 |
| Transportation Engineering I | Silgy Salim, Shiyana Joseph | 83.3 |
| Water Resources Engineering | Sherry Rose Jose | 88 |
| Concrete Technology | Vipitha Varghese | 86 |
| Computer Aided Design and Drafting Lab | Sherry Rose Jose | 88.7 |
| Material Testing Lab II | Sherry Rose Jose | 86.7 |
| OVERALL TOPPER | Sherry Rose Jose | 83.7 |

SEMESTER: S6 CE A

| SUBJECT | TOPPER NAME | MARKS (%) |
|--|---------------------|-------------|
| Design of Steel Structures | Diya Maria Varghese | 75.3 |
| Geotechnical engineering II | Bineetha Wilson .A. | 82.7 |
| Structural analysis II | Amal John | 90.7 |
| Transportation Engineering I | Anna Green Antony | 88 |
| Water Resources Engineering | Anju S Rajan | 79.3 |
| Concrete Technology | Anju S Rajan | 91.3 |
| Computer Aided Design and Drafting Lab | Amala James | 88 |
| Material Testing Lab II | Alby Rose | 88 |
| OVERALL TOPPER | Amal John | 79.3 |

INDUSTRIAL VISIT



With the aim of enhancing the spirit of practical learning and team work, the students of fifth and seventh semesters organized industrial visits.

Fifth semester students visited the Waste Water Treatment Plant in Wonderla Amusement Park, Namma Metro (Bangalore Metro Rail Corporation) Constriction Sites and Krishnaraja Sagar Dam, Mysore. 81 students took part in this 5 day educational tour starting from 13th of September to 18th of September 2013, under the guidance of four staff members of the department Naveen Joseph, Nirmal George, Linu Therese Jose and Lisa Mary Thomas.

Final year students had a very educative field trip of 5 days duration starting from 17th of September to 22nd of September 2013. 82 students accompanied by four staff members, George Mohan, Deepak John Peter, Tissa Mathew and Deepak John Peter visited RMC, Readymix Plant, Bangalore and Thungabhadra Dam and Harangi Dam sites in Karnataka.

TOPPER OF AJCE



The name of the Department of Civil Engineering, AJCE was held high when the results of the eighth semester B.Tech degree exams were announced. The college topped in the University for the Maximum Pass Percentage attained. Roshni Ramachandran is the topper of the college with a percentage of 81.62



civil Quiz

Questions

1. How many kilometers makes a mile ?
2. A house of 100 sq.m area. Convert it in sq.ft. which is the conventional unit used by the builders.
3. The price of crude oil in the International market varied from 98 USD per bbl to 118.5 USD per bbl. What is bbl?
4. Convert one pound to kilograms
5. 1 ft = _____ m
6. If a person purchases a plot of 5 acres, what is the maximum number of houses he will be able to fit in that plot if each house is of 2000 sqft area.
7. An area of AJCE campus is around 60 acres, Express it in hectares

Answers

1. 1 mile = 1.60934 kms
2. 1sq.m = 10.7639sq.ft, hence 100sq.m = 1076.39 sqft
3. bbl represents oil barrel. 1 oil barrel = 158.9 lts, 1000 bbl is represented as Mbbl and 1000000 bbl is represented as MMbbl.
4. 1 pound = 0.453592kg
5. 1ft = 0.3048m
6. 108 houses, 1 acre = 4046.86sq.m, 1 cent = 40.4686sq.m
7. 1 hectare = 10000sq.m, 24.28116 hectare

Pioneers IN CIVIL ENGINEERING

KARL VON TERZAGHI: FATHER OF SOIL MECHANICS

Karl von Terzaghi (Oct 2, 1883 - Oct 25, 1963) was an Austrian civil engineer and geologist, called the father of soil mechanics. He after an extensive experience in industry and military experiences started his academic career in 1913; he worked on bringing true engineering understanding of soil as an engineering material whose properties could be measured in standardized ways.



He set up a laboratory using only the most rudimentary equipments, and began his revolution. His measurements and analysis of the force on retaining walls were first published in English in 1919, and was quickly recognized as an important new contribution to the scientific understanding of the fundamental behavior of soils.

The American Society of Civil Engineers established in 1960 The Karl Terzaghi Award to Honour the an "author of outstanding contributions to knowledge in the fields of soil mechanics, subsurface and earthwork engineering and subsurface and earthwork construction". The Terzaghi and Peck Library, which is managed by the Norwegian Geotechnical Institute, in Oslo, Norway hold an extensive collection of his papers. The Mission Dam in British Columbia, Canada, was renamed in his honor as the Terzaghi Dam in 1965.

BEST FACULTY AWARD

Department congratulated Ms. Margaret Sherin Joseph, the winner of Best Faculty Award for the Academic Year 2012-2013.



CIVIL Engineering Marvels



Bhakra Dam is a concrete gravity dam across the Sutlej River, and is in Bilaspur, Himachal Pradesh in Northern India.

The dam, located at a gorge near the (now submerged) upstream Bhakra village in Bilaspur district of Himachal Pradesh, is India's second tallest at 225.55 m (740 ft) high next to the 261m Tehri Dam. The length of the dam (measured from the road above it) is 518.25 m; it is 9.1 m broad. Its reservoir, known as the "Gobind Sagar", stores up to 9.34 billion cubic metres of water, enough to drain the whole of Chandigarh, parts of Haryana, Punjab and Delhi. The 90 km long reservoir created by the Bhakra Dam is spread over an area of 168.35 km². In terms of storage of water, it withholds the second largest reservoir in India, the first being Indira Sagar Dam in Madhya Pradesh with capacity of 12.22 billion cu m.

Described as 'New Temple of Resurgent India' by Jawaharlal Nehru, the first prime minister of India, the dam attracts tourists from all over India.

Nangal dam is another dam downstream of Bhakra dam. Sometimes both the dams together are called Bhakra-Nangal dam though they are two separate dams.