

Principal's Message

In our journey towards perfection I sincerely hope that this initiative of Civil Department would provide a platform for the young minds to unleash their innovative ideas and in the process open new vistas in technology. As change seems to be the buzz word of the modern era let us change our thoughts to empower and transform ourselves for a bright future.

Rev.Dr. Jose Kannampuzha
Principal



DEPARTMENT OF CIVIL ENGINEERING
AMAL JYOTHI COLLEGE OF ENGINEERING

Contour



Convocation 2013



A resplendent ceremony was held on 25th of June 2013 where the fourth batch from the Department of Civil Engineering was convoked. The function was presided by **Mr. S. Gopakumar**, Unit Head, Apollo Tyres. **Dr. C.S. Sundar**, Director, Materials, IGCAR, Kalpakam, delivered the Graduation address motivating the young graduates aspiring for higher studies and bright career opportunities. It was indeed a moment of joy, when **Elvi Maria Emmanuel** of S8 CE was selected as the GEM of AJCE. With immense pleasure we wish these budding engineers the very best for their future.

DEPUTATION FOR HIGHER STUDIES



Congratulations to Ms Amritha Sunny who secured admission for pursuing PhD in IIT-Madras and Ms Minu S and Ms.Nimy Vincent who got admission for PhD in NIT Suratkal.

The department also appreciated Ms.Nitty Sebastian, Ms.Athiralakshmi S, Ms.Mareeta Joji, Mr.Charlie S Panadan for their exemplary performance in GATE 2013 thereby securing admissions for M. Tech.

International Year Of Water Cooperation

In December 2010, the United Nations General Assembly declared 2013 as the United Nations International Year of Water Cooperation. Water is vital for life, pivotal for human development and necessary to keep our environment healthy. There is a fixed amount of water on the planet and with increasing population, economic development and changing lifestyles, undue pressure has been put on the world's limited water resources leading to increased competition for water and creating situations of potential conflict. But water can be used as an instrument of peace and development as every action involving water management requires effective cooperation between multiple factors whether at the local or international scale. The objective of this International Year is to raise awareness, both on the potential for increased cooperation, and on the challenges faced in water management in light of the increase in demand for water access, allocation and services.

GEM OF AJCE



Ms. Elvi Maria Emmanuel

STUDENTS ACHIEVEMENTS

Subject Toppers and Class Toppers in Semester University Exams

Semester VII

| SUBJECT | TOPPER'S NAME | % |
|----------------------------------|---------------------------------|-----------|
| Design of Concrete Structures II | Smariya T D | 90 |
| Water Resources Engg II | Merry Thomas Cheriankunju | 87 |
| Transportation Engineering II | Merry Thomas Cheriankunju | 86 |
| Architecture & Town Planning | Roshni Ramachandran | 85 |
| Environmental Engg II | Anju Chandran, Arunima L George | 83 |
| Concrete Technology | Anju Merin Mathew | 81 |
| Transportation Engineering Lab | Elvi Maria Emmanuel | 89 |
| CAD Lab | Nimmy Thomas | 89 |
| Overall Topper | Arunima L George | 83 |

Semester V A

| SUBJECT | TOPPER'S NAME | % |
|----------------------------------|--------------------|--------------|
| Engineering Mathematics | Amala James | 82.67 |
| Computer Programming | Aditya Tom | 75.33 |
| Design Of Concrete Structures-I | Amal John | 84.00 |
| Geotechnical Engineering-II | Amal John | 82.67 |
| Quantity Surveying And Valuation | Kquiny Sabin | 79.33 |
| Structural Analysis-I | Aditya Tom | 64.00 |
| Computer Techniques Lab | Amala James | 89.33 |
| Geotechnical Engineering Lab | Aksa Esther Thomas | 81.33 |
| Overall Topper | Amala James | 74.17 |

Semester V B

| SUBJECT | TOPPER'S NAME | % |
|----------------------------------|---|--------------|
| Engineering Mathematics | Sandra Maria Cherian | 91.33 |
| Computer Programming | Renjana Mathew | 74 |
| Design Of Concrete Structures-I | Sandra Maria Cherian | 88 |
| Geotechnical Engineering-I | Sandra Maria Cherian & Sherry Rose Jose | 84 |
| Quantity Surveying And Valuation | Sobin Mathew | 87.33 |
| Structural Analysis-I | Sherry Rose Jose | 68 |
| Computer Techniques Lab | Sherry Rose Jose | 88.66 |
| Geotechnical Engineering Lab | Sherry Rose Jose | 86 |
| Overall Topper | Sherry Rose Jose | 79.92 |

Semester III A

| SUBJECT | TOPPER'S NAME | % |
|------------------------------------|-------------------------|-----------|
| Engineering Mathematics II | Anu Susan Joseph | 92.67 |
| Economics And Communication Skills | Asha Antony | 84.67 |
| Fluid Mechanics | Anu Susan Joseph | 90.67 |
| Mechanics Of Solids I | Akhila Jobie Eapen | 93.33 |
| Surveying I | Jillu Jose | 78 |
| Engineering Geology | Gipson George Abraham | 82 |
| Material Testing Lab I | Anjana Jose, Bisto Tom | 84 |
| Surveying Practical I | Anjana Jose | 88 |
| Overall Topper | Anu Susan Joseph | 83 |

Semester III B

| SUBJECT | TOPPER'S NAME | % |
|------------------------------------|---------------------|--------------|
| Engineering Mathematics II | Nivea Thomas | 99.33 |
| Economics And Communication Skills | Thomaskutty Mathew | 87.33 |
| Fluid Mechanics | Reshma Thankachan | 97.33 |
| Mechanics Of Solids I | Nivea Thomas | 92.00 |
| Surveying I | Nivea Thomas | 90.00 |
| Engineering Geology | Nivea Thomas | 84.00 |
| Material Testing Lab I | Reshma Thankachan | 87.33 |
| Surveying Practical I | Nivea Thomas | 95.45 |
| Overall Topper | Nivea Thomas | 91.33 |

GATE 2013

The department of Civil engineering AJCE was adorned with pride and honor when 15 of its students qualified GATE 2013. This result is the outcome of the GATE coaching initiated by a group of agile faculty members of our department in 2011. Congratulations to all the successful students for their meritorious achievement and special appreciation to the entire faculty for their relentless effort.



Christi Jose
(47)



Shara Siby
(40.6)



Ansa V Karim
(36)



Ebin Varghese
(33)



Roshni Ramachandran
(32.6)



Jince P Zacharia
(32)



Merry Thomas
Cheriankunju (31)



Smariya T.D.
(30)



Ashi T Raphel
(30)



Erin Jake Wilson
(29)



Nivy elsa Mohan
(29)



Tissa Tomy
(28.6)



Arunima L George
(27.3)



Ugwal Prakash
(26.67)



Mary Rency
(25)

ICI-FACE 2013

The Civil Department of AJCE secured a certificate of appreciation from Cochin chapter of Indian Concrete Institute (ICI), as the students actively participated in many of the events organized by the institute.

Cochin chapter of Indian Concrete Institute (ICI) provides efficient industry-academia interface for the budding Civil engineers in their pre-final years, from various engineering colleges, by conducting a workshop named Finishing Aids for Civil Engineers (FACE). 12 of our pre final year students have completed their course successfully (Sunday batch).

The students of Sixth Semester Civil Engineering bagged first prize in the Concrete Cube Strength Test Competition conducted by ICI (Indian Concrete Institute), Kochi Chapter in March 2013.

Nithin Thomas Sam of Sixth Semester Civil Engineering secured first in the Quiz competition organized by Bharathi Cements in association with ICI, during FACE 2013, conducted at Albertian Institute of Science and Technology (AISAT), Kochi.



Amal Jyothi Team which won First Prize in Concrete Cube Strength Test Competition conducted by, ICI Kochi Chapter in March 2013, with Chief Guest Dr. Anil Joseph (Center) & Asst. Professor Mr. Arun Sunny



Mr. Shelly S. Fernandez, Chairman, ICI-Kochi away the prize to Nithin Thomas Sam.

STUDENT ACHIEVEMENTS - Technical Fests, Youth Festivals and Sports

| Name | Fest | Name of the College | Event | Prize Awarded |
|-------------------------|-----------------|--------------------------------|----------------------|---------------|
| Jince P Zachariah | Ignite | Sri Vellapally Natesan College | CAD Designer | First |
| Erin Jake Wilson | Ignite | Sri Vellapally Natesan College | CAD Designer | Second |
| Elvi Maria Emmanuel | Nakshathra '13 | Saintgits | Paper Presentation | Third |
| Elvi Maria Emmanuel | Nakshathra '13 | Saintgits | Meg event | Second |
| Shanu Thomas | Nakshathra '13 | Saintgits | Paper Presentation | Second |
| Abraham Thomas Parambil | Nakshathra '13 | Saintgits | Best Cartoonist | First |
| Manuel Tom | Nakshathra '13 | Saintgits | Best Cartoonist | First |
| Mathews Francis | Nakshathra '13 | Saintgits | Master Designer | Third |
| Manuel Tom | Nakshathra '13 | Saintgits | Best Artist Junk Art | First |
| Shahul Hameed | Nakshathra '13 | Saintgits | Best Artist Junk Art | First |
| Manuel Tom | Urvara'13 | MG University | Cartooning | First |
| Ansaf V Karim | Pace Tournament | MG University | Cricket | First |
| Logi N Bobby | Pace Tournament | MG University | Cricket | First |
| Muhammed Hasil | Pace Tournament | MG University | Cricket | First |



NSS

As the National Service Scheme Programme officer of AJCE, Ansu Thomas, Assistant Professor, Civil Engineering Department has attended NSS programme officer's training from June 12th-18th, of 2013 at Rajagiri college of Social Sciences Kalamassery. She also participated in State Level Workshop for PO's and Volunteer Secretaries at Mar Baselious College of Engg. & Tech, Vidya Nagar Nalanchira, Trivandrum on 28th-29th of June 2013. Athira S (S5 IT) and Anson H Mathew (S5 AUE) also accompanied her.

Special Training Programme

The students are given special training in Civil Engineering softwares like RIVET, AUTO CAD, STAAD, and PRIMAVERA which are certified. The training provided for the application of Total station (advanced surveying equipment) had enabled the students for the better understanding of surveying in the real world scenarios.

civil Quiz

Questions

1. What is the weight of one bag of cement?
2. Kerala is proud to house the largest earth dam in India, and the second largest of its kind in Asia . Which is that dam?
3. Which is the NH nearest to AJCE?
4. "The Tribunal, in a unanimous decision in 2007, determined the total availability of water in the Cauvery basin at 74 tmcfeet at the Lower Coleroon Anicut site, including 14 tmcft for environmental protection and seepage into the sea. The final award makes an annual allocation of 419 tmcft to Tamil Nadu in the entire Cauvery basin, 270 tmcft to Karnataka, 30 tmcft to Kerala and 7 tmcft to Puducherry."
The above statements are in relation with the Cauvery water dispute. What does tmc or tmcft stand for?
5. Being a Civil Engineer , have you thought who is the Father of Civil Engineering ?
6. First railway line in Kerala. You can also think about the first railway line in India
7. First planned city in India
8. All of us are aware of TMT (Thermo Mechanically Treated) bars. What does CTD bars mean?

Answers

1. 50 kg
2. Banasura Sagar Dam
3. National Highways 183 (NH 183) (Old NH 220) is located in India. It connects Kollam in Kerala with Theni in Tamil Nadu. Starting from NH 47 in Kollam it runs northwards and turns eastwards at Kottayam and runs along the northern border of Periyar Wildlife Sanctuary, before crossing the border into Tamil Nadu and it ends at Theni, where it joins NH 49 (Kochi-Rameswaram) and NH 45 (Chennai-Theni).
4. Thousand Million Cubic Feet
5. John Smeaton was the first self-proclaimed civil engineer, and often regarded as the "father of civil engineering".
6. On March 12, 1861, Kerala's first train, built by Madras railway company, chugged along the Beppur- Tirur line(30.6 km)
7. Chandigarh: The city of Chandigarh was the first planned city in post independent India in 1947 (pre-independence planned cities include Dispur in Assam, New Delhi in Delhi, Jaipur in Rajasthan, etc. and is known internationally for its architecture and urban design).
8. CTD stands for Cold Twisted Deformed



PIONEERS IN CIVIL ENGINEERING

Transportation Engineering is an inevitable part of Civil Engineering. Isambard Kingdom Brunel (9 April 1806 – 15 September 1859), was an English mechanical and civil engineer who built dockyards, the Great Western Railway, a series of steamships including the first propeller-driven transatlantic steamship and numerous important bridges and tunnels. His designs revolutionized public transport and modern engineering. Brunel, who had designed many suspension and railway bridges across various rivers in London and Bristol, is regarded as one of the expert who had played a major role in the development of bridge engineering.

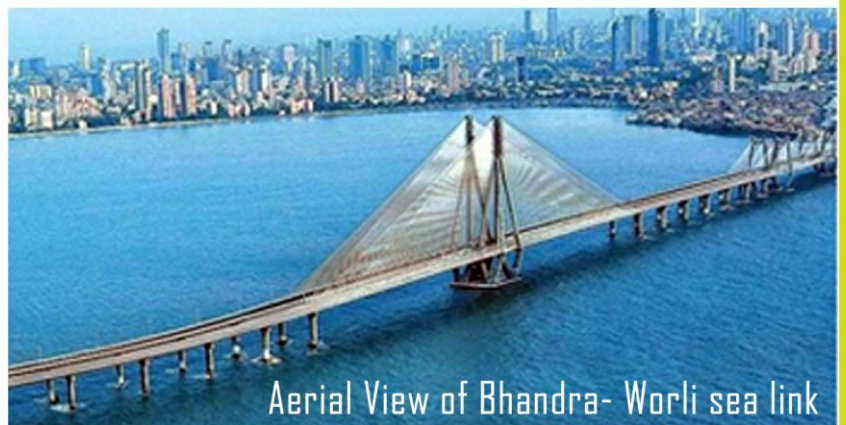


CIVIL Engineering Marvels

The Bandra-Worli Sea Link, officially called Rajiv Gandhi Sea Link, is a cable-stayed bridge with pre-stressed concrete-steel viaducts on either sides that links Bandra in the Western Suburbs of Mumbai with Worli in South Mumbai. The bridge is a part of the proposed Western Freeway that will link the Western Suburbs to Nariman Point in Mumbai's main business district.

The 16 billion (US\$280 million) bridge was commissioned by the Maharashtra State Road Development Corporation (MSRDC), and built by the Hindustan Construction Company. The first four of the eight lanes of the bridge were opened to the public on 30 June 2009 and all eight lanes were opened on 24 March 2010.

The sea-link reduces travel time between Bandra and Worli during peak hours from 60-90 minutes to 20-30 minutes. As of October 2009, BWSL had an average daily traffic of around 37,500 vehicles.



Aerial View of Bhandra- Worli sea link