

CIVIL CHRONICLE

*Newsletter by Department of Civil Engineering
Adi Shankara Institute of Engineering and Technology, Kalady*



Department Vision

**TO EMERGE AS A CENTRE OF EXCELLENCE
IN CIVIL ENGINEERING WITH GLOBAL
PERSPECTIVES.**

Department Mission

- **TO IMPART QUALITY PROFESSIONAL EDUCATION SO THAT THE STUDENTS EMERGE AS A COMPETENT PROFESSIONAL IN THE AREA OF CIVIL ENGINEERING.**
- **TO PROMOTE INNOVATIVE THINKING AND LIFELONG LEARNING IN BUDDING ENGINEERS.**
- **TO PRODUCE CIVIL ENGINEERS WHO HAVE IMBIBED ETHICAL VALUES TO SERVE THE SOCIETY AND NATION.**

IN THIS ISSUE

INSTITUTE EVENTS

DEPARTMENT ACTIVITIES

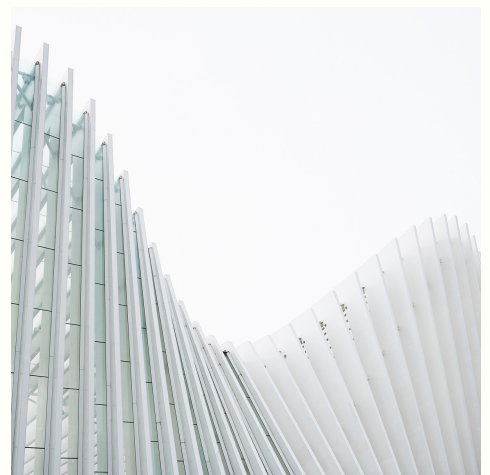
STUDENT ACHIEVEMENTS

STAFF OUTREACH

FOOD FOR THOUGHT

Program Educational Objectives (PEOs)

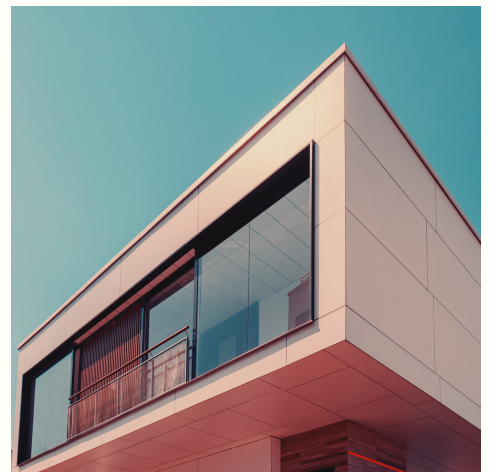
- GRADUATES WILL HAVE A POTENTIAL TO PURSUE HIGHER STUDIES AND RESEARCH IN THE FIELD OF CIVIL ENGINEERING AND INTERDISCIPLINARY AREAS.
- GRADUATES WILL BE ABLE TO PRODUCE SUSTAINABLE SOLUTIONS WITH PROFESSIONAL ETHICS FOR REAL TIME CIVIL ENGINEERING PROBLEMS.
- GRADUATES WILL HAVE MANAGERIAL SKILLS AND LEADERSHIP QUALITIES IN EXECUTION OF CIVIL ENGINEERING PROJECTS.
- GRADUATES WILL BE ABLE TO WORK WITH INTEGRITY AND ETHICAL VALUES.



Program Specific Outcomes (PSOs)

AFTER SUCCESSFUL COMPLETION OF B.TECH IN CIVIL ENGINEERING, THE STUDENTS WILL BE ABLE TO:

- CHECK THE FEASIBILITY AND SUSTAINABILITY OF CIVIL ENGINEERING PROJECTS BY CONDUCTING GEOTECHNICAL INVESTIGATION, CIVIL ENGINEERING SURVEY AND ENVIRONMENTAL IMPACT ASSESSMENT.
- ANALYSE AND DESIGN BUILDINGS, HYDRAULIC STRUCTURES AND WATER DISTRIBUTION, WASTE MANAGEMENT AND TRANSPORTATION SYSTEMS.
- EXECUTE CIVIL ENGINEERING PROJECTS WITH THEIR KNOWLEDGE IN ESTIMATION, PROJECT MANAGEMENT, CONSTRUCTION MATERIALS AND TECHNOLOGIES



**CIVIL ENGINEERING
DEPARTMENT**

TIDAL FLOOD MAPPING



Awareness workshop and volunteer training programme on Tidal Flood Mapping Climate Change and Aggravated High Tide Flooding: Co-Creation of Community Resilience in Coastal Ernakulam was conducted at Adi Shankara Institute of Engineering and Technology, Kalady, Ernakulam on 11th November 2022.

During the workshop they trained a group of volunteers who later distributed the Tidal Flood calendar to households clearly explaining the methodology of data collection. The data collected will be analyzed by experts for preparing a disaster mitigation plan that will include identification of various engineering and management solutions.

INSTITUTE EVENTS

TIDAL FLOOD MAPPING

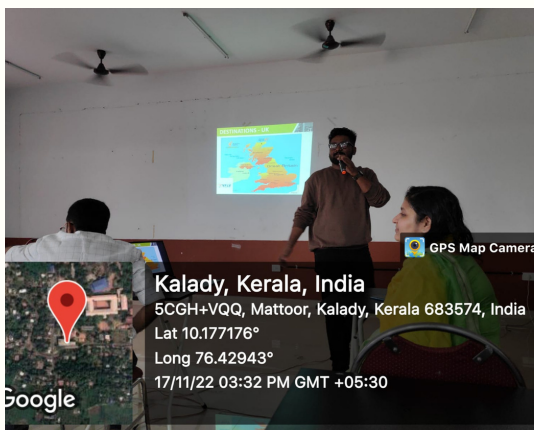
From the Department of Civil Engineering students participated include Binslet Biju, Vidyadhar Prabhu, Bestin Johnson, Harishankar. K, Sandra A.S, Farha Fathima T. A, Agna A, Adhila T Kabeer, Athulya M.R,C. and J Jayalakshmi of S3 Civil, Raoof Backer, Muhammad Ansil, Sarath MP, Leo Benny, Fahim Bin Samad, Thariq ahmmmed, Denna Babu, Anagha Sivankutty, Annmole P Averachen, Rumaisa Sidhik, Neha Ajayakumar, Asna Polachan, and Gayathri S of S5 Civil, Navaneeth V Nair, Jairam Adithya, Ram Kumar S and Pranav Ashok of S7 Civil under the guidance of department head Mr. Aneesh P C.



INSTITUTE EVENTS

FLYING HIGH- A SEMINAR ON HIGHER STUDIES AND CAREER OPPORTUNITIES ABROAD

The Department of Civil Engineering organised a technical seminar in association with YFLY INTERNATIONAL on the topic “FLYING HIGH- A Session on Higher studies and career opportunities abroad after civil engineering”. It was conducted on 17th November 2022 at Civil Department Seminar Hall. Students of S5 and S7 attended this uplifting seminar. The speakers helped to broaden up the prospects of every student who aspires to study overseas. The session began with a welcome note by Ms. Shabnum Suhura, Assistant professor of the department. Students had an interactive section with the team of YFLY INTERNATIONAL.



DEPARTMENT ACTIVITIES

BRIDGING INDUSTRY ACADEMIA GAP- STUDENT INTERNSHIPS



Dhananjayan C V, Amith Lal, Vishnu Raju, Krishnadas PM, Blesson Poulose, Martin Baby, Jaison Chacko, Nayana C S, Pooja V Shaji, Amrutha Mani and Ashly Mathew of S7 CE have successfully completed a 5 day internship at Kerala Water Authority, Chalakudy from 10th to 14th November 2022.

K A Afsal, Abhay N G, Muhammad Abu Thahir, Lakshmi KR, Devika MJ, Amina Yasir PY, Abhirami K R, Fathima Noura, Athul Vinay, M B Syam Krihna, Vishnu T P, Aswanth VS, Aswin Suresh, Zameen Shamjad and Athif Ibrahim of S7 CE have successfully completed a 5 day internship at Design Treasury, North Paravur from 10th to 14th November 2022.

STUDENT ACHIEVEMENTS

BRIDGING INDUSTRY ACADEMIA GAP- STUDENT INTERNSHIPS

Vijay Krishnan S of S5 CE has successfully completed a 5 day internship at crescent construction company from 10th to 14th November 2022.

Anantha Krushnan K A, Gowtham M Kesav, Alphin Thankachan, Bristo K Benny and Athul Krishnan of S5 CE have successfully completed a 5 day internship at Associate architect, Pattimattom from 10th to 14th November 2022.

Anjaly Jose, Anjana SM, Nimisha, Sanjay K Shaju and Sreepriya Anilkumar of S5 CE have successfully completed a 5 day internship at Future Nest, Koratty from 10th to 14th November 2022.



STUDENT ACHIEVEMENTS

BRIDGING INDUSTRY ACADEMIA GAP- STUDENT INTERNSHIPS

Arathi Prakash, Ashika P George, Merlin Babu, Minnu Sajan and Pranav Ashok of S7 CE have successfully completed a 5 day internship at Design Plus Architects, Interiors and Contractors from 10th to 14th November 2022. During this period they visited a site located at Konni, Pathanamthitta.

Dona Babu, Aneendra Anil, Najia Nasreen and Anuja KS of S7 CE have successfully completed a 5 day internship at Technopoint, Angamaly from 10th to 14th November 2022



STUDENT ACHIEVEMENTS

BRIDGING INDUSTRY ACADEMIA GAP- STUDENT INTERNSHIPS



Pranav Pramod, Hari Krishnan, Anjana Das, Aparna K M, Basheera, Rahila Beevi V J, Vishnu Mohan and Abhinav C P of S3 CE have successfully completed a 3 day internship at Ray Engineering, Nedumbassery from 10th to 12th November 2022.

Devika Ajith of S3 CE have successfully completed a 3 day internship at Sky Builders, Kattappana from 10th to 12th November 2022.

Sandra Salimkumar and Bibiya M Dinesh of S3 CE have successfully completed a 3 day internship at VKG group of construction, Kothamanagalam from 10th to 12th November 2022.

STUDENT ACHIEVEMENTS

STAFF OUTREACH - NOVEMBER 2022



- Research work entitled "Dibhang River Training Studies at Arunachal Pradesh, India" by Dr. P K Suresh, Visiting Professor of the Department is selected for presentation on 23rd Congress of the International Association for Hydro Environmental Engineering and Research Asia Pacific Division.

- Ms. Jyothi Lekshmi R, Assistant Professor of the department attended a webinar on "Introducing: The Precast Modular Block Design Manual for Gravity Walls" by Redi-Rock International.

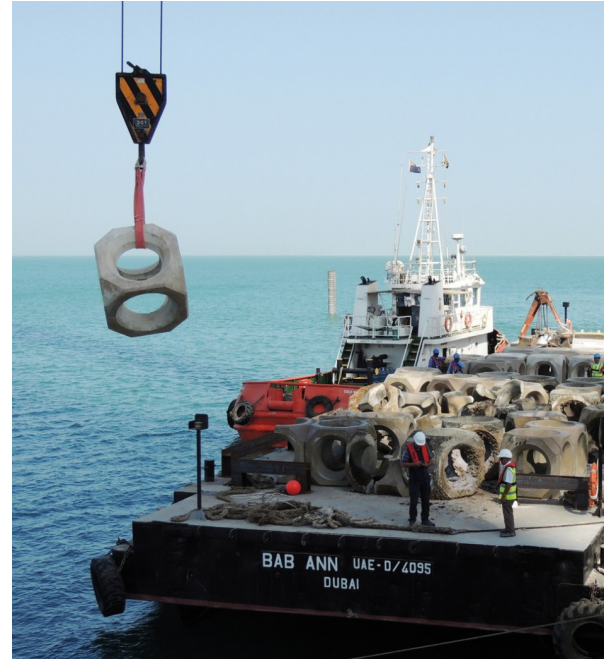


- Ms. Dona Joy, Assistant Professor of the department attended a webinar on "Dealing with Failures in Concrete Structures" organized by UltraTech Cement Ltd. on 5th November 2022.

STAFF OUTREACH

SEAWALL STRENGTHENING OF THE ICONIC BURJ AL ARAB

The Burj al Arab (translated as: Arabian Tower), is a luxury hotel that stands on an artificial island nearly 300m from the Jumeirah Beach in Dubai, UAE. Standing at 321 m, it's the third tallest hotel in the world and one of the most expensive, costing an estimated 7.8 billion dollars.



The building is notable for a number of complex engineering and construction feats. The artificial island that was constructed needed to be built low enough to give the impression that the building was floating on water. The reclamation of the land from the sea took 3 years, as engineers created a ground layer of large rocks. To avoid the risk of flooding, perforated concrete blocks were mounted on the bedrock in a honeycomb pattern designed to act as a giant artificial 'sponge' and reduce the wave impact.

FOOD FOR THOUGHT



The reinforcement of 1,500 SHED concrete armor units protecting the Burj al Arab was required, as part of their maintenance programme. Design studies found there would be benefits using in glass fiber-reinforced polymer (GFRP) rebar in 1,500 SHED units in the three layers of the tidal zone.

They will ensure the long term durability and corresponding aesthetic quality of the main island is retained. To achieve the minimum 50-year service life requirement, it was recommended the use of GFRP rebar to reinforce the 1.5m high SHED cubes. By using it the opportunity to extend the structural life, avoid tidal flood and realize long term capital and operational cost savings.



CONTRIBUTED BY:
ASHILA ANIL (S7 CE)

FOOD FOR THOUGHT

CHIEF EDITOR



Ms. SHABNUM SUHURA

STAFF EDITORS



Ms. REEMA PIUS



Ms. CLYDIN P A

STUDENT EDITORS



Ashila Anil
S7 CE



Anjanamol Jose
S7 CE



Denna Babu
S5 CE



Muhammed Faiz KI
S3 CE



Swathylakshmi Lal
S3 CE



Abhishek Anilkumar
S1 CE

HOD'S MESSAGE



IN THE HIGHLY COMPETITIVE WORLD OUTSIDE, I BELIEVE IN THE VALUE OF HARD WORK, COMMITMENT AND HUMANITY. THESE VALUE ADDITIONS ARE VERY MUCH ESSENTIAL FOR THE YOUNG TECHNOCRATS, ENGINEERS AND SCIENTISTS. AS A DEPARTMENT HEAD I ENVISION MY COLLEAGUES AND STUDENTS WALKING HAND IN HAND AND BUILDING THEIR IDEAS FOR A DEVELOPED NATION.

MR. ANEESH P C