

DECEMBER 2023, VOL 6: ISSUE 12

CIVIL CHRONICLE

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

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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.

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.



**DEPARTMENT OF
CIVIL ENGINEERING**

THE SPIRIT OF CHRISTMAS



The spirit of Christmas descended upon Adi Shankara Institute of Engineering And Technology on December 22, 2023, transforming our campus into a festive wonderland. Students, faculty, and staff gathered for a day of spreading joy and fostering a sense of unity as the academic year came to a close. The day kicked off with a heartwarming Christmas assembly in the central courtyard, where musical performances and dance routines, captivated the audience. The air echoed with laughter and applause as students showcased their artistic talents, infusing the campus with holiday cheer.

INSTITUTE EVENTS

FACULTY INTERACTION



An interaction with Dr. T R Sreekrishnan, Deputy Director, IIT New Delhi was conducted on 19th December 2023. Faculties were able to gain knowledge from this experienced dignitary on various aspects of teaching. The session began with Welcome address and introduction by Dr. Sreepriya S, Principal, Adi Shankara Institute of Engineering and Technology, Kalady. Vote of Thanks was rendered by Dr. Eldhose K K, Head of Department of Mechanical Engineering.

INSTITUTE EVENTS

SEMINAR



On December 8th, 2023 as part of National Pollution Prevention Day, the Department of Civil Engineering hosted a seminar led by Dr. Mini K D, Associate Professor, Department of Zoology, Sree Sankara College, Kalady. The event was coordinated by Ms. Jyothilekshmi R, Assistant Professor of the Department.

DEPARTMENT EVENTS

SOLVAIR



As part of National Pollution Prevention Day, the Department of Civil Engineering organized 'Solvair', an online poster making competition with the theme 'Clearing the air for future generation' on 6th December 2023. Muhammed Faiz of S5 CE, Adi Shankara Institute of Engineering and Technology bagged first position. The event was coordinated by P A Thariq Ahammed and Rumaisa Sidhik from S7 CE. Event was overseen by staff coordinator Ms. Jyothilekshmi R, Assistant Professor, Department of Civil Engineering.

DEPARTMENT EVENTS

ECOPENCILIZE



As part of National Pollution Prevention Day, the Department of Civil Engineering organized 'Ecopencilize', a drawing competition with the theme "Festivals without Pollution" on 6th December 2023. Fathimathul Zahra from Jama-Ath HSS, Thandekkad, secured 1st position. The event was coordinated by Leo Benny and Anakha Sivankutty from S7 CE along with Ms. Jyothilekshmi R, Assistant Professor, Department of Civil Engineering.

DEPARTMENT EVENTS

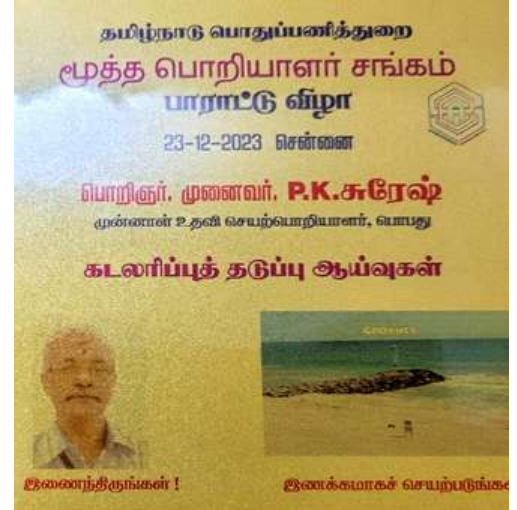
STUDENT ACHIEVEMENTS



Ms. Rumaisa Sidhik S7 CE, Ms. Aparana K M S5 CE, Ms. Amrutha C M S3 CE and Ms. Gopika Shanavas S3 CE received PTA Award of excellence as the academic toppers in the Sixth, Fourth and Second semester for the results published by APJ Abdul Kalam Technological University in the year 2023.

STUDENT ACHIEVEMENTS

STAFF OUTREACH



Dr. P K Suresh, Visiting Professor of the Department addressed the 28th International Conference on Hydraulics, Water Resources, River, and Coastal Engineering. The event took place at the National Institute of Technology, Warangal on 23rd December 2023.



STAFF OUTREACH

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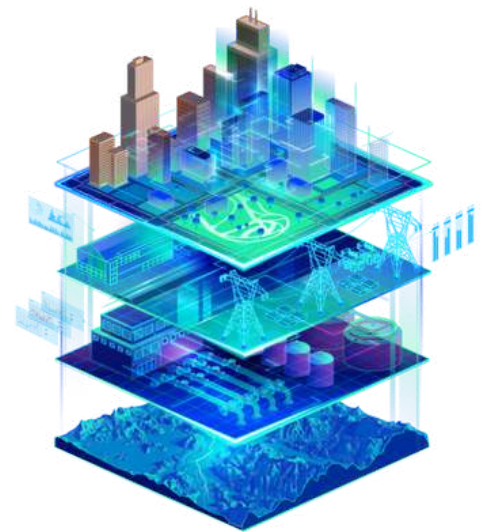


Dr. A N Swaminathen, Professor of the Department received the GreenThinkerz International Outstanding Young Researchers Award 2023 and released a paper titled "A Probabilistic Fault Detection Approach for the Management of Energy and Environment in Buildings using the BiGRU-SA Approach".



STAFF OUTREACH

DIGITAL TWINS



Digital Twins is certainly a buzzworthy term, but what benefit does it have for the construction industry? As it sounds, a digital twin is a digital replica of a physical entity, including its potential and current assets, systems, data, processes, workflows, people, and devices. In the context of construction, digital twins gather data through sensors to better understand a physical structure and then create its duplicate.

Having a duplicate source of a physical structure allows workers to assess, manipulate, and optimize the building. As they analyze the digital twin, they can uncover potential means of creating efficiencies, developing safety protocols, reducing risks, and improving quality. Digital twins also enhance BIM by serving as a digital thread, connected directly to a physical structure.

FOOD FOR THOUGHT

Since almost 80% of a building's lifetime value is realized during operations, the data and insights provided by a digital twin helps owners better maintain their facilities, streamline operations, and improve capital planning. You can also use digital twins to determine if a built asset is meeting certain KPIs and metrics. “If you have certain sustainable goals, you’ll be able to see if you’re achieving them. If you have equipment and want to measure mean time between failure, having a digital twin helps you do that,” explains Bob Bray, Senior Director & General Manager for Autodesk Tandem. It can also help owners strategize for the future. As Bob points out, “A digital twin gives you the knowledge to inform, predict, and look at future decisions based on how that asset is performing in the real world.”

Lastly, the advantages of digital twins are especially relevant during times of social distancing, remote work, and travel restrictions. Essential information about a property is readily accessible with a digital twin, avoiding the need to travel or even leave a home office.



Contributed by



Abhishek Anilkumar
S3 CE

FOOD FOR THOUGHT

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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