SHRI G.S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE

DEPT. OF CIVIL ENGINEERING AND APPLIED MECHANICS

NEWSLETTER

JAN-JUNE 2024

Vol. 04 -2024

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Vision of the Department

A strong source in Civil Engineering field making significant contribution to human resource development considering dynamic needs of the society.

Mission of the Department

- M1: To generate experts in Civil Engineering field, useful for the nation and society.
- M2: To develop students for accelerated socioeconomic growth in professional and challenging environment of industries in modern world.
- M3: To motivate the students to apply the knowledge of civil engineering, preserving human values.

UG STUDENTS STP VISIT AT KABIT KHEDI: 245 MLD sewage treatment plant based on SBR process at Kabitkhedi, Indore

The STP site visit guided by Professor Devendra Dohare on 14 March 2024 was held. The purpose of this technical visit is to provide a comprehensive overview and analysis of the Sewerage Treatment Plant (STP) located at Kabit Khedi, Indore. The visit aimed to assess the plant's infrastructure, operational efficiency, compliance with environmental regulations, and identify areas for improvement based on SBR process..

Student at Kabit Khedi STP Plant Indore

The Kabit Khedi STP is a vital facility responsible for treating wastewater generated from the Indore region. With a capacity of 245 MLD, it plays a crucial role in safeguarding public health and the environment by effectively treating sewage before discharge. Sequential batch reactor (SBR) is a type of biological treatment system in which stabilization of organic matter, flocculation of generated cells and settling of cells occur in a safe tank. In its operations, the cycle processes FILL-REACT, REACT, SETTLE DRAW are controlled by time to achieve the objectives of the operation.

CIVIL TUSSLE 2024 ORGANIZED BY CLUB TRIVIM:Engineering Innovation in Action

Club TRIVIM is a technical club of civil engineering and applied mechanics department. The main objective of our club is to help students in developing their skills and innovative ideas and research activities of various fields of civil engineering. The main motive of this group is to provide technical and field knowledge regarding the various aspects of civil engineering like Structural analysis, Structural design, Environmental engineering, Water resource engineering and Building planning and architecture.

The prestigious CIVIL TUSSLE event, successfully organized by CLUB TRIVIM at the Civil Engineering Department on February 22-23, 2024, showcased emerging engineering talent through multiple challenging stages. With a prize pool of ₹10,000, the event attracted top student innovators.

The cornerstone event - the Popsicle Stick Structure Challenge - saw remarkable engineering prowess among eight competing teams. Team TRIPOD emerged as the standout performer, with their

structure withstanding an impressive 44kg load while maintaining minimal deflection of just 4mm. Teams GAMMA and HARSHIT also demonstrated exceptional engineering, with their structures holding strong until the 40kg mark Beyond structural challenges, participants navigated through engaging segments including Traffic Maze, Quizzy Buzzy, and Keep the Cup Up. A highlight was the tactical toll station challenge, which received widespread acclaim for its practical approach to real-world engineering problems Students demonstrated exceptional problem-solving abilities as they tackled complex riddles and engineering challenges, showcasing not only technical expertise but also creative thinking. The event successfully achieved its core objectives of promoting hands-on engineering experience, fostering teamwork, and encouraging innovative solutions.

Group photo of members

Judging Committee at the Event

Environmental Initiative: To Create Record-Breaking Miyawaki Forest

SGSITS is developing MP's first campus Miyawaki forest, planting 8,000 saplings across one acre. Targeting a Guinness Record and preserving native species, the project led by Alex Mundapuzha and Dr. Rakesh Saxena will complete by January 15

The participated team developed bridge model

The two-day event, marked by enthusiasm and competitive spirit, has set a new benchmark for engineering competitions at the department. Each participating team brought unique approaches to challenges, particularly in structural design, where emphasis was placed on load-bearing capacity and deflection management. This multi-faceted engineering competition proved to be more than just a contest - it was a platform for future engineers to apply theoretical knowledge to practical challenges, making it one of the most engaging events of the year.

Load testing of bridge model

Inspiring Future Engineers: Student Outreach Program at SGSITS Civil Engineering Department"

In February 2024, the Civil Engineering Department of Shri Govindram Seksaria Institute of Technology and Science (SGSITS) organized an engaging student outreach program under the leadership of Dr. Rakesh Khare. The event was designed as part of the institute's social engineering initiatives aimed at inspiring young minds to explore career opportunities in civil engineering.

The outreach program welcomed school students, providing them with a unique opportunity to gain insight into the diverse and impactful field of civil

engineering. Through an interactive session, students were introduced to various aspects of the discipline, including infrastructure development, structural design, transportation engineering, environmental sustainability, and innovative construction technologies.

The program aimed to bridge the gap between theoretical knowledge and real-world applications by engaging students in discussions, hands-on activities, and live demonstrations. It encouraged young learners to consider civil engineering as a fulfilling and impactful career path.

This initiative by SGSITS reflects its commitment to nurturing future engineers and fostering innovation in civil engineering. By reaching out to school students, the institute hopes to ignite curiosity, inspire ambition, and create awareness about the immense potential of the civil engineering profession.

School Students interaction with professor R.K Khare

REVIT Workshop for UG Students: Pioneering Digital Design Excellence

REVIT workshop launched during event AAYAM 2024 As CLUB STIMULUS's first-ever REVIT training initiative, this workshop marked a significant milestone in our commitment to enhancing students' technical expertise.

Workshop Highlights:

- Comprehensive introduction to Autodesk REVIT
- Hands-on training in Building Information Modeling (BIM)
- Focus on practical applications in architectural and structural design
- Interactive sessions with industry-experienced instructors

The overwhelming response from students exceeded our expectations, with the participants actively engaging in this learning opportunity. The workshop successfully bridged the gap between academic knowledge and industry-required skills

REVIT workshop, launched during event AAYAM 2024 by Club STIMULUS.

FACULTY UPDATES

AWARDS AND ACHIEVEMENTS

Dr. S.K. Ahirwar & Kundan Meshram have received a Patent on "Cellular Reinforcement Supported Embankment on Expansive Soil" on 27 Feb 2024.

CONFERENCES

Dr. S.M Narulkar presented his paper on "'Exploring Fluctuations in Daily Rainfall and Temperature Extremes in the Upper Chambal River Catchment from 1983 to 2005'" at The 4th International Conference on River Corridor Research and Management (RCRM-2024) is jointly organized by IIT Guwahati and IIT Jammu

STUDENT SECTION

ACHIEVEMENTS

- Remarkable achievements of students who got placed in L & T Construction in 2024:
  - Krish Salve
  - Ashish Jain
  - Anshuman Shrivastav
  - Sanyam
  - Nimesh Mishra
  - Prince Ahirwar
  - Aditya Sahu
  - Divyansh Jain
  - Utsav Sethi
  - Neeraj
  - Shivansh Pandey
- Students placed in JK cement : Mitali Dode, Shruti Burhanpurkar and Anjali Mandloi
- Shivam Tiwari placed in Deloitte and Shruti - Indus tower.

- We are proud to announce the remarkable achievements of our students who have secured admissions to prestigious institutions for their M.Tech programs:

(1) Krish Salve (IISC Bangalore), (2) Neelam Shukla (IIT Gandhinagar), (3) Adarsh Kumar Gargey (IIT Indore)