JANUARY – JUNE 2025

DEPARTMENT OF CIVIL ENGINEERING HALF-YEARLY

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NEWSLETTER

Message from the Head of Department

It gives me immense pleasure to present the first issue of our half-yearly departmental newsletter. The period from January to June 2025 has been filled with achievements, activities, and academic advancements. This newsletter is a reflection of the dedication and hard work of our faculty, students, and staff. We look forward to continued excellence in education, research, and societal contributions.

Greetings from the Department of Civil Engineering

Academic Highlights

- **Curriculum Reforms:** Implementation of NEP-aligned curriculum with added electives in Green Construction and Smart Cities.
- **Industrial Visits:** Organized visits to Delhi Metro Rail Project, NTPC Dadri, and UltraTech Concrete Plant.
- **Workshops:**
  1. Recent Advances in Concrete Technology, Guest lecture by Prof. R. K. Gupta (IIT Delhi).
  2. AutoCAD & STAAD Pro Training Week.

Faculty Achievements

- The winning innovation, titled "**Sustainable Solution for Onsite Wastewater Treatment**," is a flagship project of Manipal University Jaipur. This is also a patented innovation, recognized by the Government of India and plays a vital role in supporting the Swachh Bharat Mission by providing a sustainable wastewater treatment solution.
- This achievement reflects MUJ's strong research ecosystem, state-of-the-art facilities, and unwavering institutional support.

Research & Innovation

- Received a grant of **2 lakhs** from ***Anusandhan National Research Foundation (ANRF)*** for conducting the **1st International Conference on Artificial Intelligence for Resilient Infrastructure and Sustainable Engineering Materials.**
- S.K. Das, R. Maaze, N. Garg and S. Shrivastava, Economic-Environmental and Multi-Criteria Optimization for Predicting Alkaline Ratios in Waste Cement Concrete-Based Geopolymer Using Central Composite Design, International Journal of Concrete Structures and Materials, 2025, Scopus Q-1 Journal.
- Investigation of Urban heat island and Urban Thermal Field Variance Index effect on groundwater level in India using Google Earth Engine.

Community & Outreach

Club Garuda by S.K DAS is a movement of conscious expression inspired by the mythical Garuda, symbolizing intellect and protection. Bridging heritage and innovation, it has two wings: Rasaveda, celebrating cultural and spiritual traditions, and Vigyanam, focusing on technical knowledge and innovation. What sets Garuda apart is its deep commitment to charity and social upliftment. All events, from cultural performances to coding workshops, aim to support education, healthcare, and basic needs for underprivileged children. With no membership fees, Garuda reinvests every rupee back into the community, blending creativity with a strong sense of social responsibility.

Student Achievements

- Presented poster in International Conference on Engineering and Technological Innovation for Sustainable Development.
- Koshalya Godha of Civil Engineering Department received best M. Tech. Thesis award by Indian Concrete Institute, Rajasthan state centre and UltraTech cement limited.
- Presented an oral paper titled "FTIR Analysis of Sustainable Green Concrete Incorporating Copper Mine Tailings" at the ENVIRONMENT2024 conference, Indian Institute of Technology, Guwahati.
- Conference paper titled "Application of NDT Techniques in Copper Tailing Added Concrete" at ASMMI 2025, hosted by Birla Institute of Technology and Science, Pilani

Dr. Chaitanya Baliram Pande recognized among the top 2% of scientist's worldwide (Stanford list, 2024) with Global Scientist Ranking is 35345.

JOURNAL PUBLICATIONS

- Climate Change and Land Use Dynamics: Modeling Soil Erosion Scenarios to Achieve Sustainable Development Goals
- Seasonal Precipitation and Anomaly Analysis in Middle East Asian Countries Using Google Earth Engine
- Advanced Neural Network Approaches for Optimal Check Dam Site Selection in Sub-Tropical Climates
- Predicting Changes in Land Use and Land Cover using Remote Sensing and Land Change Modeler