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**DEPARTMENT OF
CIVIL ENGINEERING**



NEWSLETTER

An Insight into the Department of Civil Engineering. Exploring Key Events, Research Highlights and Sustainable Initiative.

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1

HOD's Message

2

Publications

3

Consultancy Projects

4

Women Faculty
Achievers

5

Outreach Activities

6

Achievement

7

Details of New
Faculty Joined

8

Message from
Alumni

CONTENTS





MESSAGE *from the* HOD's Desk



Dear All,

As we step into a new month, I want to take a moment to reflect on our progress and road ahead. In the past month, we have achieved significant progress in publications and projects of our R&D activities.

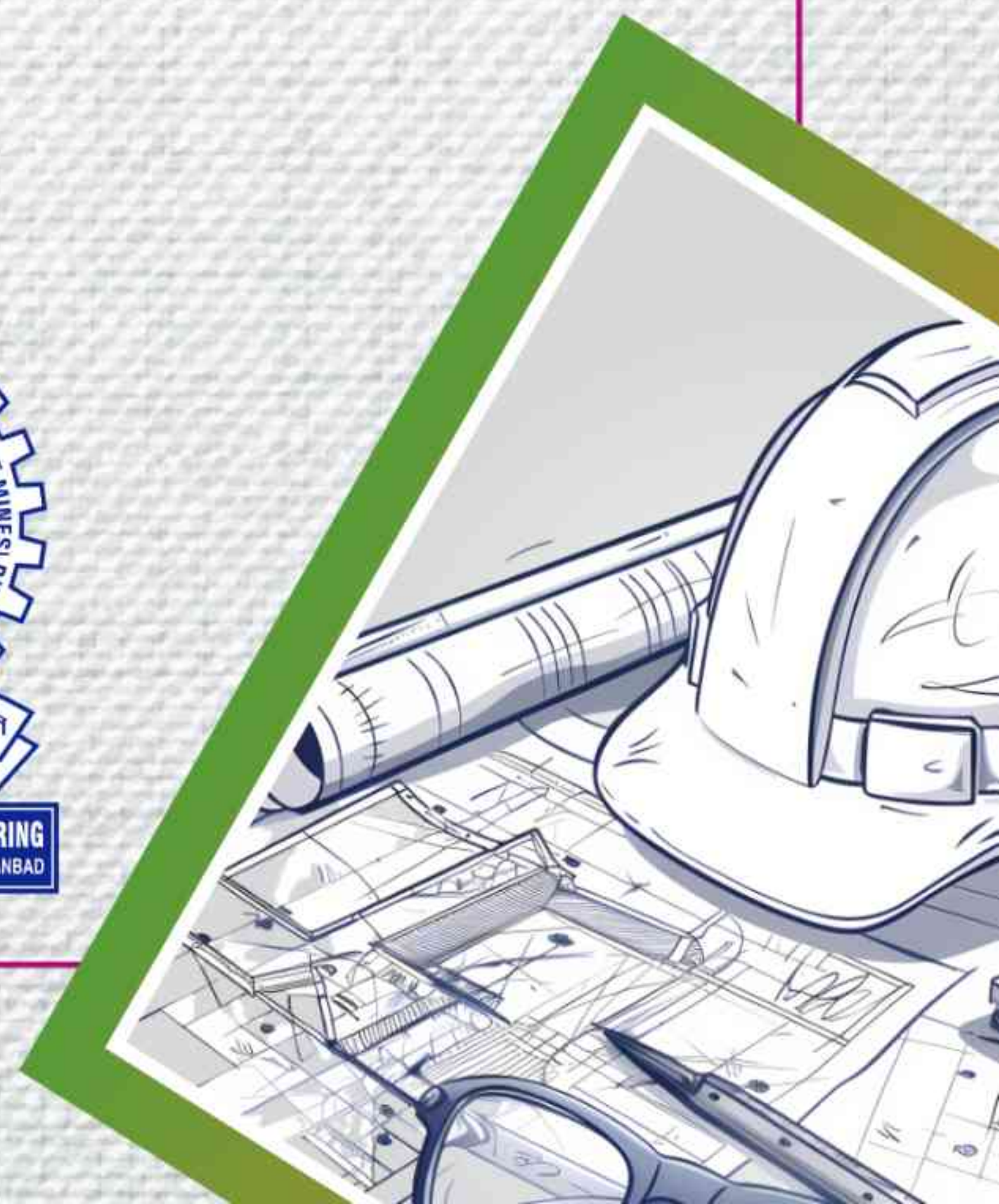
Looking ahead, we have exciting project and goals to accomplish. I encourage everyone to stay motivated, embrace innovation, and continue supporting one another. Your contributions make a difference, and together, we will keep pushing boundaries and achieving great things.

Thank you for your continued dedication. Let's make this month even more productive and inspiring!

Prof. Srinivas Pasupuleti



DEPARTMENT OF CIVIL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY (ISM) DHANBAD



WOMEN FACULTY ACHIEVERS

Prof. Piyali Sengupta was felicitated on 7 February, 2025 in the ASCE International Conference on Challenges and Innovations for Sustainable Smart Cities (CISSC) 2025, held during 7-9 February, 2025 at Novotel Hotel, Chandigarh for her contribution in the domain of Structural Engineering and also for her leadership in ASCE India Section: Eastern Region. She also served as Session Chair in two sessions of the international conference on 8 and 9 February, 2025.



OUTREACH ACTIVITIES

WORKSHOP

A one-day "IIT(ISM) Dhanbad Annual R&D Fair" 2025 was held on 1st February 2025 along with the Industry Institute Interaction (III) event. The R&D fair was organized with an aim to create opportunities for all departments to showcase their significant products, technologies, research facilities, and capabilities for possible technology commercialization, industry-academia collaboration, industry-sponsored R&D projects, and consultancies. In accordance, the following list of Patents published by the Civil Engineering Department was displayed.

1. **Prof. Sekhar Chandra Dutta, Prof. Sarat Kumar Panda, Prof. Sanket Nayak, Prof. Lohitkumar Nainegali, Prof. Sumit Kumar.** Published Indian patent No.202231040574 for their invention titled 'A Method Of Constructing I Building Structures On Backfilled Opencast Mines'.
2. **Dr. Lalima Banerjee, Prof. Sowmiya Chawla and Prof. Sujit Kumar Dash.** Published Indian patent No.202331077988 for their invention titled 'A Method of Building Geocell Reinforced Railway Tracks, Over Weak Subgrade, Using Recycled Coal Overburden As Subballast'.
3. **Prof. Satadru Das Adhikary and Mr. Dipanshu Jain.** Published Indian patent No. 202431006089 on 16.02.2024 for their invention titled 'A cement-free mortar (CFM) composition.'

In addition to these patents, two posters displaying the achievements and lab facilities of the Civil Engineering Dept. were also put up in the stall. The event was coordinated by Prof. Shushobhit who was a member of the R&D fair at the Institute level and Prof. Punyabeet who was the FIC from the department with cooperation from IPDFs and research scholars of the department.

WORKSHOP



INTERNAL FACULTY INVITED TALK

Prof. Leeza Malik delivered an expert talk on *"Electrifying Logistics: Assessing the Viability of eLCVs in Jharkhand's Transport Sector"* as part of online lecture series for the *Center for Studies on Environment and Climate at the Asian Development, Patna*. The online session was held on Monday, February 24, 2025, at 11:00 AM IST.



INTERNAL FACULTY INVITED TALK

Prof. Punyabeet Sarangi acted as an expert speaker for the one Week Faculty Development Program on: "SMART AND SUSTAINABLE TRANSPORTATION SYSTEM- A Need of Developing Countries" from 10th – 14th Feb, 2025 at the Department of Civil Engineering, Government College of Engineering (GCE), Keonjhar, Odisha and delivered an online talk on the topic *"Electric Vehicles (EVs) in Developing Countries: Is it the Way Forward?"*.

Mr. Ayush Chaturvedi (Admission No 23MT0088) received the best paper award in the ASCE International Conference on Challenges and Innovations for Sustainable Smart Cities (CISSC) 2025, held during 7-9 February, 2025 at Novotel Hotel, Chandigarh for his research paper titled ***"Seismic Fragility Assessment of Heritage Structures through Field Testing and Numerical Simulations"*** co-authored by **Prof. Piyali Sengupta**.



Mr. Shankar Kumar received best technical paper award in the theme of Soil Dynamics and Earthquake Engineering in Indian Geotechnical Conference 2024. (Paper authored by Shankar Kumar, Rajib Sarkar, Lohitkumar Nainegali; Presented by Mr. Shankar Kumar)

DETAILS OF NEW FACULTY JOINED



Prof. Akshay Gupta has joined as an Assistant Professor in the Department of Civil Engineering. He holds a B.E. in Civil Engineering from MBM Government Engineering College, Jodhpur, and an M.Tech. in Transportation Engineering from IIT Roorkee. Later he worked as a Transportation Planner at AECOM. He completed his Ph.D. in Transportation Engineering at IIT Roorkee and later pursued postdoctoral research at IIT Bombay. He conducted extensive research on driving behavior, human factors, and intelligent transportation systems. His research focuses on advanced sensor analytics, lane-changing behavior, and intelligent transport solutions, contributing to safer and more efficient mobility systems.

MESSAGE FROM ALUMNI



Dr. Anshumali Mishra
Postdoctoral Researcher

*Sustainable Construction
Materials and Applications*

**Faculty of Technology
University of Oulu, Finland**

B.Tech. (BPUT, Rourkela)
M. Tech. (NIT Rourkela)
Ph. D. (IIT (ISM) Dhanbad)
Institute Best Ph. D. Thesis Award

I earned my Bachelor's in Civil Engineering with an Institute Gold Medal from BPUT, Rourkela in 2015, followed by a Master's in Geotechnical Engineering at NIT Rourkela, where I developed a keen interest in research. This passion led me to IIT (ISM) Dhanbad, where I began my Ph.D. in Geotechnical Engineering in the Department of Civil Engineering in 2018.

My time at IIT (ISM) Dhanbad was both intellectually stimulating and personally transformative. The rigorous academic environment deepened my research expertise, while extracurricular activities and the support of peers helped me develop leadership, teamwork, and a well-rounded perspective.

A defining aspect of my journey was the mentorship of Prof. Sarat Kumar Das and Prof. Krishna R. Reddy, whose guidance was invaluable. Their insights not only helped me refine my research but also provided crucial support during challenging phases. Prof. Das extended his mentorship beyond academics, offering encouragement and guidance that played a vital role in my personal and professional growth.

IIT (ISM) Dhanbad offered me a unique opportunity to have international exposure as a SPARC Fellow in 2022. My doctoral research resulted in the publication of nine articles in esteemed journals. In 2024, I was honored with the Institute Best Ph.D. Award in the Department of Civil Engineering at IIT (ISM). That same year, I embarked on the next phase of my academic career as a Postdoctoral Researcher in the Sustainable Construction Materials and Applications unit at the University of Oulu.

Looking back, my experience at IIT (ISM) Dhanbad has had a profound impact on my academic and personal development. The challenges, opportunities, and mentorship I received have equipped me for the next steps in my career, and I remain deeply grateful for the experiences that continue to shape my journey.