



FROM THE HOC'S DESK

It gives me immense pleasure to present the Quarterly Report of the CIL Innovation & Incubation Centre, IIT (ISM) Dhanbad. This newsletter contains all the activities of center from January 2025 to March 2025. The month from January to March 2025 has been marked by a series of events. The Department demonstrated the facilities, products, and equipment of the CII centre to the students, executives and other guest on their visits.

The CIL Innovation & Incubation Centre (CII Centre), IIT (ISM) Dhanbad, organized the Smart & Sustainable Ideathon – Phase II with 32 student participants, along with a Two-Day Workshop on Edge AI Workflow Design and Its Applications for Mining Industries, which attracted 71 registrations.

The Centre achieved a major milestone with the grant of a patent and IPR to its incubated startup TechXEarthSpace Pvt. Ltd. for its innovation on CO₂ capture, utilization, and storage using Non-Linear Wave Technology (Granted on 31st January 2025).

Additionally, TechXEarthSpace Pvt. Ltd. was recognized under the Low Carbon Accelerator Program by the United Nations Environment Programme (UNEP) and Massive Earth Foundation for its efforts toward sustainable and low-carbon technologies.

Quarterly Newsletter

January - March 2025

CIL Innovation & Incubation Centre IIT ISM (DHANBAD)

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Students Visit



Brief demonstration of the facilities of CII Centre Labs and showcasing the products developed in the CIL Innovation & Incubation Centre to students of Government Degree College, Shopian (Kashmir)

A brief demonstration of the state-of-the-art facilities at the CII Centre Labs, along with a showcase of the innovative products developed at the CIL Innovation & Incubation Centre, was conducted for the students of Government Degree College, Shopian (Kashmir). During the visit, the students were introduced to various ongoing projects, prototyping setups, and technologies being developed at the Centre. The interaction aimed to inspire young minds, promote innovation, and provide them with practical insights into the process of research, development, and entrepreneurship.



Students Visit



A brief demonstration of the facilities of CII Centre Labs and showcasing the products developed in the CIL Innovation & Incubation Centre to the students of BBMKU

A brief demonstration of the facilities at the CII Centre Labs, along with a showcase of the innovative products developed at the CIL Innovation & Incubation Centre, was conducted for the students of Binod Bihari Mahto Koyalanchal University (BBMKU). The visit provided students with valuable exposure to cutting-edge technologies, research infrastructure, and startup initiatives supported by the Centre, fostering curiosity and encouraging them to explore opportunities in innovation and entrepreneurship.



Students Visit



A brief demonstration of the facilities of CII Centre Labs and showcasing the products developed in the CIL Innovation & Incubation Centre to the students of BIT Deoghar

A brief demonstration of the advanced facilities at the CII Centre Labs and a detailed showcasing of the innovative products developed in the CIL Innovation & Incubation Centre were organized for the students of BIT Deoghar. During the visit, the students were introduced to various technological developments, prototypes, and research projects being undertaken at the Centre. The interactive session provided them with valuable exposure to real-world applications of innovation, product design, and incubation processes. It also aimed to inspire the young minds to pursue entrepreneurial ideas and contribute to the growing ecosystem of technology-driven startups.



Ideathon

A brief demonstration of the facilities of CII Centre Labs and showcasing the products developed in the CIL Innovation & Incubation Centre to the students of BIT Deoghar



The poster features a large yellow dump truck in a mining quarry at the top. Below it, the text reads "CIL INNOVATION & INCUBATION CENTRE", "IIT ISM DHANBAD", "Legacy that Inspires the Future", and "100 Years of Excellence in Education & Research".
PRIZES:
FIRST PRIZE: ₹ 50,000
SECOND PRIZE: ₹ 30,000
THIRD PRIZE: ₹ 20,000
SMART & SUSTAINABLE MINING IDEATHON
S2 MINING IDEATHON
BENEFITS:-

- Selected team will be given an opportunity for pre-incubation subject to qualifying criteria
- Seed Funding up to ₹ 5 Lakh for startups
- Certificate of Completion
- IPR credit to the developing team and the mentor

SCAN FOR PROBLEM STATEMENT
TIMELINE:
Level 1 - Till 31st March 2025
Level 2 - To be notify later
Level 3 - To be notify later
SCAN TO REGISTER BEFORE 31st MARCH 2025
CONTACT US
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The CIL Innovation & Incubation Centre, IIT (ISM) Dhanbad, organized the “Smart & Sustainable Ideathon – Phase II (S2 Mining Ideathon - Phase II)” to encourage innovative thinking and sustainable solutions in the mining sector. The program commenced on 10th March 2025 and witnessed enthusiastic participation from 32 students. Through this initiative, participants explored creative ideas aimed at addressing real-world challenges in mining using smart and sustainable technologies. The Ideathon served as a platform for students to showcase their problem-solving skills and gain exposure to innovation-driven approaches in the industry.

Workshop



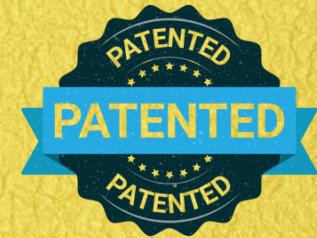
Two-Day Workshop on Edge AI Workflow Design and its Applications for Mining Industries" was conducted at the CIL Innovation & Incubation Centre on 8th and 9th March 2025. A total of 71 students have registered for this event.

A Two-Day Workshop on "Edge AI Workflow Design and its Applications for Mining Industries" was organized at the CIL Innovation & Incubation Centre, IIT (ISM) Dhanbad, on 8th and 9th March 2025. The workshop introduced participants to the fundamentals of Edge Artificial Intelligence and its real-world applications in mining operations.

A total of 71 students participated, gaining hands-on experience in AI workflow design, data processing, and the integration of intelligent systems in industrial settings. The program offered valuable insights into how emerging technologies like Edge AI can enhance innovation and efficiency in the mining sector. Certificates were awarded to all participants upon successful completion of the workshop.



Patents & IPR



**TECHX
SPACE EARTH**

CIL Innovation & Incubation Centre Achieves Patent Milestone

The CIL Innovation & Incubation Centre (CII Centre), IIT (ISM) Dhanbad, has achieved a significant milestone with the grant of patents and intellectual property rights (IPR) to one of its incubated startups, TechXEarthSpace Pvt. Ltd. The patented innovation, titled “Scalable System and Process for Selective Capturing of Carbon Dioxide, Its Utilization, and Storage Using Non-Linear Wave” (Application No. 202441003540), was granted on 31st January 2025. This remarkable achievement reflects the Centre’s continued commitment to nurturing innovation, research excellence, and technology-driven entrepreneurship. The development contributes meaningfully toward advancing sustainable and scalable solutions for environmental challenges, particularly in the areas of carbon capture and utilization.



Achievement



Our Incubatee, M/s TechXEarthSpace Pvt Ltd, has been recognised by the Low Carbon Accelerator Program, organized by the United Nations Environmental Program (UNEP) and Massive Earth Foundation.



TechXearth Space

Building a technology to capture CO₂ using liquid absorption and non-linear wave mechanics to convert into Sodium Bicarbonate which can be used in fertiliser, detergents, textiles and chemical industries.

Our incubated startup, M/s TechXEarthSpace Pvt. Ltd., has been recognized under the prestigious Low Carbon Accelerator Program, organized by the United Nations Environment Programme (UNEP) and Massive Earth Foundation. This recognition highlights the company's commitment to developing innovative, sustainable, and low-carbon technologies that contribute to global environmental goals. The achievement reflects the Centre's continuous efforts to nurture startups working towards impactful solutions in the fields of sustainability, climate action, and green innovation.





Team Profile



Prof. R. K. Sinha
Head of the Centre
CII Centre



Mr. Rahul Raj
Executive Officer
CII Centre



Mr. Deepak Kumar
Technical Assistant
CII Centre



Mr. Binod Kumar
Technical Assistant
CII Centre



Mr. Vimal Kr. Mahato
Junior Technician
CII Centre



Mr. MD. Shourab
Junior Technician
CII Centre



Mrs. Arti Kumari
Office Assistant
CII Centre



Mr. Rohit Kr. Goswami
Young Professional
CII Centre



Mr. Neetish Raj
Young Professional
CII Centre