



April - June 2025

Quarterly Newsletter

CIL Innovation & Incubation Centre IIT ISM (Dhanbad)

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 April 2025 to June 2025.

The month from April to June 2025 has been marked by a series of Achievement and Ongoing Projects at CIL Innovation & Incubation Centre.

The CIL Innovation & Incubation Centre is developing a portable LiDAR-based system for real-time slope stability and terrain mapping. The low-cost handheld prototype efficiently captures and processes data on-site and lays the foundation for future drone-based mapping applications in mining and geotechnical studies.

Our incubated startup, M/s Pinnacle Depth Mine Management & Services Pvt. Ltd., has achieved an impressive turnover of ₹14.76 crores in the previous financial year. This remarkable accomplishment reflects the company's strong performance and growth in the mining sector, showcasing the impact of the CIL Innovation & Incubation Centre's support in nurturing successful and scalable startups.

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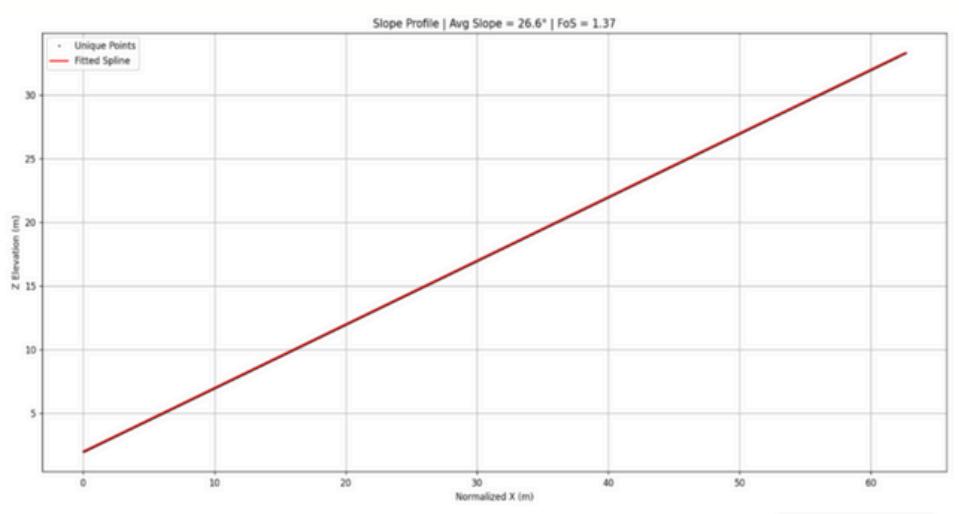
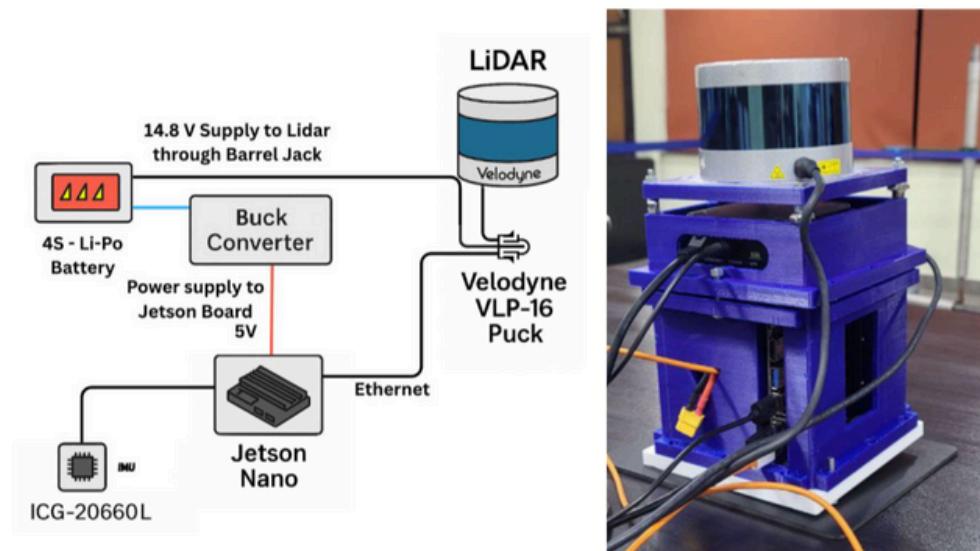


Ongoing Projects

Handheld LiDAR Sensor for Slope Stability Analysis with an onboard data processing unit

This project demonstrates the feasibility of building a low-cost, portable, and reliable system for terrain mapping and slope stability analysis using LiDAR and IMU. The handheld prototype performs efficiently and lays the groundwork for a drone-integrated mapping platform in the future.

Expected Outcomes: A hand-held device will be developed, which will be used for real-time slope stability.



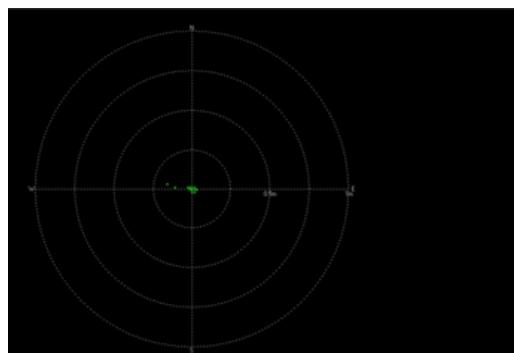
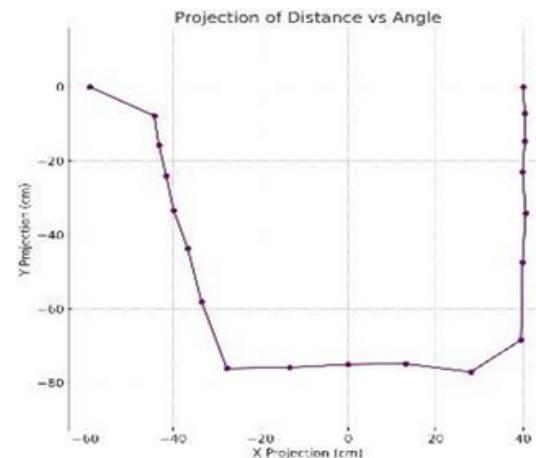


Patents & IPR

AccuDepthPro

AccuDepthPro – Device for finding the depth profile of trenches with super-accurate location.

A novel device has been developed for accurately determining trench depth profiles in mining and geotechnical exploration. The system integrates LiDAR-based scanning with RTK positioning for high-precision, real-time 3D profiling. With IIoT connectivity, it enables live data visualization through mobile and web dashboards, ensuring safer, faster, and more reliable trench mapping. This innovation supports digital mine planning, ore zone delineation, and volumetric analysis, enhancing efficiency and decision-making in mining operations.

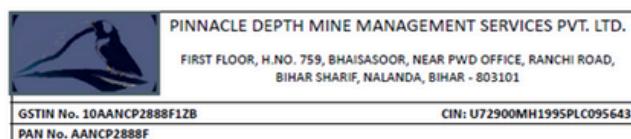




Achievement

Our Incubatee, M/s Pinnacle Depth Mine Management & Services Pvt Ltd., has achieved a turnover of ₹14.76 crores in the previous Financial Year.

Our incubated startup, M/s Pinnacle Depth Mine Management & Services Pvt. Ltd., has achieved an impressive turnover of ₹14.76 crores in the previous financial year. This milestone reflects the company's strong growth, operational excellence, and commitment to delivering innovative solutions in the mining sector. The achievement also highlights the success of the incubation support provided by the CIL Innovation & Incubation Centre in nurturing high-potential startups.



Details of work order of M/s Pinnacle Depth Mine Management & Services Pvt Ltd
Year ending 2024-25.

Company Name	Work Order Date	Amount	Order Detail:
Mangalam CoalFeild Pvt Ltd	10/08/2024	₹ 68,23,740/-	Dewatering
Eageldeep PB Dhanbad Coal Pvt Ltd.	26/08/2024	₹ 14,00,00,000	Dewatering
R. K Coal Mine Pvt Ltd.	12/12/2024	₹ 1,98,955/-	Planning and Execution of 100M Depth 14" Borehole and insert HDPE pipe with proper clamping and all fittings Underground mine: Salanpur.
Rudraksh Enterprises	25/12/2024	₹ 6,00,000/-	
Tata Steel	18/06/2025	₹ 2,10,00,000/-	Pending
Total		₹ 16,86,22695/-	



Sincerely,
Mr. Santu Kumar
Project Head
Ex-AM (Operation) Hindustan Zinc Limited
B.Tech Mining Engineer (IIT ISM Dhanbad)
Pinnacle Depth Mine Management & Service Private Limited
Mob: 6200224594





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