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PRESS-RELEASE

IIT (ISM) Dhanbad Launches GIAN Course on Geo-Environmental Design of Tailings Storage Facilities

The Department of Civil Engineering at the Indian Institute of Technology (Indian School of Mines), Dhanbad has opened a Global Initiative of Academic Networks (GIAN) course titled “**Geo-Environmental Consideration for the Design of Tailings Storage Facilities**”, running from **June 23 to 27, 2025**.

The programme was inaugurated today by **Prof. Sukumar Mishra**, Director, IIT (ISM), who served as Chief Guest. Joining him on the dais were **Prof. Srinivas Pasupuleti**, Head of Civil Engineering, and **Prof. Sukha Ranjan Samadder**, Local GIAN Coordinator.

Eminent geotechnical specialist **Mr. Bibhuti Bhusan Panda**, Senior Geotechnical Engineer at AECOM, USA, is the foreign faculty for the course. Together with Course Coordinator **Prof. Sarat Kumar Das**, Dean (Faculty), Mr. Panda delivered the opening technical session to delegates from premier institutes and industry, including representatives of event sponsors **Megaplast** and **Krubber Pvt. Ltd.**

Focused on the safe and sustainable management of mining tailings—the fine-grained by-product of mineral processing—the week-long course addresses contemporary challenges in the planning, operation, monitoring and closure of Tailings Storage Facilities (TSFs). Content is organised into four integrated modules:

1. **Tailings disposal and TSF planning** – principles of dam design, site selection and disposal strategies.
2. **Hydro-geotechnical parameters** – tailings characterisation, seepage, stability and liquefaction analysis.
3. **Monitoring and intermittent raisings** – instrumentation such as InSAR and piezometers, inspection regimes and predictive technologies.
4. **Closure, reclamation and post-closure monitoring** – cover systems, long-term containment, regulatory compliance and sustainable land-use planning.

By blending advanced academic insights with field experience, the course equips practising engineers, researchers and regulators to implement best-practice geo-environmental solutions and mitigate the risks associated with large-scale tailings storage.

Rajni Singh

Dean (Corporate Communications)