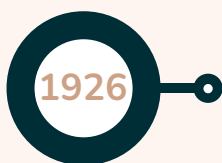




## Branch at a Glance

# DEPARTMENT OF MINING ENGINEERING

The Department of Mining Engineering introduced with the School's foundation in 1926 under the rule of the contemporary Viceroy, Lord Irwin. Over the past 90 years, it has developed to become the largest department of its kind in the country with excellent facilities for teaching, research and widespread activities in coal, metalliferous mining, and construction sectors. The Department is recognized as a QIP Centre for the faculties of other Mining Engineering Departments to pursue higher studies (M. Tech. and PhD). The Department has been accorded the status of "Centre of Advanced Studies" in Mining Engineering by the University Grant Commission, in recognition of its high standards of teaching, research and services to the mining industry.



Department established

### DOMAINS OF STUDY

- Fundamental and Advanced Mining Techniques
- Mine Planning, Economics, and Management
- Geomechanics and Rock Mechanics
- Surveying, Geospatial Technologies, and Remote Sensing
- Mine Ventilation and Environmental Engineering
- Mine Safety, Legislation, and Ethics
- Specialized Mining Methods and Technologies

### LABORATORIES - UG, PG

- Mine Surveying
- Rock Breakage
- Rock Mechanics
- Mine Ventilation
- Microwave Remote Sensing
- Geospatial Data Modelling
- Geomechanics
- Computer Aided Mine Planning and Design
- Mine Simulation and Data Analytics
- Rock Excavation

Courses	Strength
B. Tech	103
M. Tech	34

### PLACEMENTS & INTERNSHIPS

**51+** LPA  
Max. CTC

**9+** LPA  
Median CTC

**40k** / mo  
Median Stipend during Internship

### Core Companies



ADITYA BIRLA GROUP



Reliance Industries Limited



Bharat Coking Coal Limited



DEEPAK FERTILISERS AND PETROCHEMICALS CORPORATION LIMITED

& many more...

updated data from 23-24'



# Research & Development

## Meet our HOD



### Prof. DEVI PRASAD MISHRA

(Chair Professor)

November, 2022 - Present

PhD - IIT Kharagpur

MTech- IIT (ISM) Dhanbad

B.E. - Orissa School of Mining Engineering, Keonjhar

#### Primary Areas of Research

Mine Ventilation and Sub-surface Environment, Application of CFD in Mine Ventilation, Methane drainage, Coal Bed Methane (CBM)/Underground Coal Gasification (UCG), Fly ash stowing/backfilling, Radiation monitoring in mines, Environmental radioactivity.



#### Achievements

- Conferred Canara Bank Research Publication Award for the two consecutive years 2017 & 2018 by IIT (ISM), Dhanbad
- Recipient of the Hindustan Zinc Limited Prize and Dr. Rajendra Prasad Memorial Prize by Institution of Engineers (India) for his technical papers.

### Ongoing & Completed Departmental Research

1. Development of guideline for prevention and mitigation of explosion hazard by risk assessment and determination of explosibility of Indian coal incorporating risk based mine emergency evacuation and re-entry protocol – CIMFR, Dhanbad, ISM, Dhanbad and CIL, Kolkata. Funding Agency: CIL, Ranchi - Prof. R.M. Bhattacharjee.
2. Development of Virtual Reality Mine Simulator (VRMS) for improving safety and productivity in coal mines. Funding Agency: CIL, Ranchi - Prof. V. M. S. R. Murthy.
3. Methane Drainage Prior to Mining. Funding Agency: DST, New Delhi - Prof. V. M. S. R. Murthy.
4. MHRD(SPARC)(4)/2023- 2024/1033/MNE: Micromechanical Simulation of Overburden Dump Slope under Field Geomining Conditions. MHRD, New Delhi. Funding Amount: 54.00 Lakh Rupees. - Prof. Radhakanta Koner.
5. MoC/2023-2024/1026/MNE: Development of Synthetic Lightweight Aggregates as Backfilling Material using Hydraulic Stowing Method. Ministry of Coal. Funding Amount: 36.47 Lakh Rupees. - Prof. Bhanwar Singh Choudhary.
6. DST(SERB)(382)/2022-2023/995/MNE: Slope Instability Severity (SIS) Assessment at Coalfield Level using Integration of Innovative Spaceborne InSAR and Relevant Data for Enhanced Slope Failure Predictions. DST-SERB, New Delhi. Funding Amount: 56.95 Lakh Rupees. Prof. Mohammad Soyeab Alam.
7. CIL(21)/2021- 2022/854/ME: Real-Time Energy Efficient Cyber-Physical Intelligent System For Mine Slope Health Monitoring. Coal India Limited. Funding Amount: 238.97 Lakh Rupees. - Prof. Radhakanta Koner.
8. SAIL(5)/2021- 2022/799/ME: Assessment of The Change Detection Due To Mining Activities of Sail-Rmd Mines Through Preparation of High Resolution Satellite Map Obtained From Fusion of Cartosat-2 And Liss-Iv Datasets At A Scale of Cadastral Map And Preparation of Lulc Maps of High-Resolution Satellite Image. Steel Authority of India Limited. Funding Amount: 28.62 Lakh Rupees. - Prof. Vasanta Govind Kumar Villuri



## Student Activities, Alumni and More

### SME IIT (ISM) DHANBAD STUDENT CHAPTER



SME IIT(ISM) Students Chapter, an IIT (ISM) Dhanbad student chapter of Society for Mining, Metallurgy & Exploration was inaugurated in May 2011. It was found with the sole purpose of kindling curiosity and interest in the minds of the students of ISM about the field of mining engineering. The society collectively works in the way of making our presence known to the world as a potential body of mining engineers.

#### Strategic objectives

- Strengthen the technical knowledge of students.
- Promote scientific research in students.
- Enhance leadership skills and integration among members.
- Student representation skills and prestige to the University.
- Disseminate responsible mining with Peruvian society.

#### Industrial Collaborations

- Eastern Coalfields Ltd.
- Bharat Coking Coal Ltd.
- National Thermal Power Corporation
- National Hydro-electric Power Corporation
- Tata Iron and Steel Co. Ltd.
- Steel Authority of India Ltd.
- Mangenese Ore India Ltd.
- Uranium Corp. of India Ltd.

& many more...

#### Government Collaborations

- Ministry of Defence.
- Central Bureau of Investigation.
- Ministry of Mines.
- Ministry of Coal.
- Ministry of Mines & Petroleum, Govt of Islamic Republic of Afghanistan
- Ministry of Environment & Forests
- Ministry of Water Resource

& many more...

#### GATE - 2024 RESULTS

- Ashutosh Kumar - 2 AIR
- Ayushman Tiwary - 5 AIR
- Himanshu Jaiswal - 7 AIR
- Shubham Pandey - 11 AIR
- Karthikey Sharma - 13 AIR
- Rohith Kumar Mondal - 17 AIR
- Vedant Kothiya - 22 AIR
- Ankit Kumar - 24 AIR
- Om Sandilya - 27 AIR
- Yash Sati - 33 AIR
- Sarthak Srivastava - 34 AIR
- Nikita Sharma - 35 AIR
- Shubham - 38 AIR
- Shashank Shekhar - 62 AIR
- Harsh Chhaparia - 75 AIR
- Naveen - 90 AIR

& many more...

#### Our Distinguished Alumni:

- Gulshan Lal Tandon was a pioneer in the Indian Mining Industry, the former Chairman of Coal India Limited who played a major role in the establishment of Coal India. Gulshan Lal Tandon received his B Tech degree in Mining from Indian School of Mines, Dhanbad in 1951. He served as the Chairman of Neyveli Lignite Corporation and Coal India Ltd.
- Mr. Pankaj Kumar Satija, Batch of 1994, Mining Engg, Indian School of Mines, Dhanbad has been appointed as the MD of Tata Steel Mining. He has played a key role in strategic planning, mining operations, and other critical areas.