IIT ISM

INDIAN INSTITUTE OF TECHNOLOGY
INDIAN SCHOOL OF MINES
DHANBAD

Department of Mining Engineering

THE MINING EDGE

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From HOD Desk

It is a matter of great pleasure to present this volume of the Departmental Monthly Magazine, which captures the academic vibrancy, research advancements, and professional engagements of the department. The activities and achievements highlighted in this issue reflect our sustained commitment to excellence in teaching, research, innovation, and societal relevance. The magazine serves as an important platform to document and disseminate the collective efforts of our faculty, students, researchers, and staff.

During the period under review, the department has witnessed significant progress across multiple dimensions, including high-quality research publications, successful completion of sponsored and consultancy projects, organization of academic and professional development programmes, and meaningful industry–academia collaborations. These initiatives not only strengthen our academic ecosystem but also contribute towards addressing contemporary challenges faced by the mining and allied sectors through scientific and technological interventions.

The department continues to place strong emphasis on experiential learning, capacity building, and the integration of emerging technologies into education and research. Field visits, training programmes, workshops, and infrastructure development initiatives undertaken during the month exemplify our efforts to bridge the gap between theoretical knowledge and practical application, while preparing students to meet professional and societal expectations with competence and integrity.

I take this opportunity to commend the dedicated efforts of all faculty members, students, and staff whose commitment and teamwork have been instrumental in sustaining the department's growth and reputation. I also appreciate the editorial team for their meticulous efforts in compiling this issue. I hope this magazine not only serves as a record of our collective achievements but also inspires continued excellence, innovation, and collaboration in our future academic endeavors.

Warm regards,
Prof. B.S. Choudhary

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IIT (ISM) Dhanbad Commemorates 100 Years of Academic and National Service

IIT (ISM) Dhanbad marked its 100th Foundation Day, celebrating a century of contributions to engineering education, earth sciences, energy research and national development. The Foundation Day ceremony, held at the Penman Auditorium, marked the culmination of the Centenary Foundation Week (3–9 December 2025), inaugurated by Dr. P. K. Mishra, Principal Secretary to the Prime Minister. The week-long celebrations comprised academic and thematic symposia, exhibitions, cultural programmes, alumni interactions and community outreach activities, collectively highlighting the institute's rich historical legacy and its future-oriented vision.

The event was graced by Shri Gautam Adani, Chairman of the Adani Group, as Chief Guest. In his Foundation Day Address, he emphasised the importance of resource and energy sovereignty for national development in the 21st century. Highlighting IIT (ISM)'s historical role in strengthening India's command over its natural resources, he underscored the need for developing nations to define their own growth narratives. He also announced initiatives including annual paid internships for students and the establishment of the Adani 3S Mining Excellence Centre in collaboration with TEXMiN, encouraging students to contribute fearlessly to India's economic and technological self-reliance.

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IIT (ISM) Dhanbad Commemorates 100 Years of Academic and National Service

Prof. Prem Vrat, Chairman of the Board of Governors, reflected on the centenary as a celebration of a vision conceived in 1926 and sustained through collective commitment across generations. He noted the institute's transformation from a specialised mining school to a multidisciplinary, globally connected institution, guided by principles of academic rigour, societal relevance and responsibility.

In his welcome address, Director Prof. Sukumar Mishra described the centenary as a historic milestone symbolising the institute's intellectual evolution and alignment with India's scientific and technological progress. He highlighted IIT (ISM)'s growing engagement in emerging areas such as energy systems, artificial intelligence and sustainability, reaffirming the institute's commitment to excellence, innovation and national service as it embarks on its second century.

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IIT (ISM) Dhanbad Commemorates 100 Years of Academic and National Service

The ceremony featured the screening of a centenary film documenting the institute's hundred-year journey, followed by the presentation of awards recognising distinguished contributions in academics, research, innovation, leadership and institutional service. After the national anthem, the Chief Guest inaugurated the Adani Centre of Excellence at the TEXMiN building and interacted with senior executives, faculty members and alumni.

The programme concluded with a Vote of Thanks by Deputy Director Prof. Dheeraj Kumar, who acknowledged the support and contributions of the Chief Guest, dignitaries, alumni, faculty, staff, students and institutional partners. As IIT (ISM) Dhanbad enters its second century, the institute reaffirms its commitment to nurturing future scientists, engineers and leaders, marking not only the celebration of a distinguished legacy but also the beginning of a renewed pursuit of national and global excellence.

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IIT (ISM) Dhanbad Commemorates 100 Years of Academic and National Service

A plantation drive was undertaken on the eve of the Centenary Celebration of IIT (ISM), Dhanbad as part of the institute's commitment to environmental sustainability and campus greening.

During the Centenary Celebration of IIT (ISM) Dhanbad, Dr. Sunil Kumar, Senior Technical Officer, Department of Mining Engineering was conferred with the Long Service Award in recognition of his dedicated, sincere, and commendable service to the institute over the years.

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Inauguration of the VRMS Facility Centre by the Hon'ble Union Minister of Coal and Mines

The Department proudly marked a significant milestone with the inauguration of the VRMS Facility Centre by Shri G. Kishan Reddy, Hon'ble Union Minister of Coal and Mines, Government of India. The inauguration of this advanced facility underscores the Government of India's continued commitment to strengthening technological capabilities, innovation and safety in the mining and mineral sectors.

The VRMS Facility Centre is envisioned as a state-of-the-art platform aimed at enhancing research, training and decision-making through advanced virtual and digital technologies. The facility is expected to support high-end simulation, visualization and modelling of mining systems, thereby contributing to improved mine planning, risk assessment, operational efficiency and sustainable resource management. Its establishment reflects a strategic alignment between academic research and national priorities in the coal and mining sectors.

The inauguration of the VRMS Facility Centre represents a major step towards fostering interdisciplinary research, industry–academia collaboration and experiential learning. It is expected to significantly strengthen the department's teaching and research ecosystem, while contributing to national efforts in advancing technologically driven, safe and sustainable mining practices.

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Inauguration of Bord and Pillar Mining Installation

The Department of Mining Engineering marked a significant academic milestone with the inauguration of the Bord and Pillar mining installation on 3 December 2025. The initiative was undertaken with the objective of strengthening experiential learning and enhancing students' understanding of one of the most widely practiced underground coal mining methods.

The Bord and Pillar installation has been developed as an educational and demonstration facility, designed to provide students with a clear conceptual and practical understanding of underground mine layout, panel development, pillar design, extraction sequences, and ground control considerations. The facility enables students to visualize critical aspects of bord and pillar mining, including roadway development, pillar formation, roof support systems, ventilation planning, and safety measures, thereby bridging the gap between theoretical instruction and real-world mining practices.

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Executive Development Program on Mining Technology for Caterpillar Executives

Sitting (L to R) : S/Shri: Umasri Devireddy, Prof. Santosh Kumar Behera, Prof. Bhaskara Behera, Prof. Bhanwar Singh Choudhary (HOD), Prof. Keka Ojha (Dean, CEP), Prof. Mritunjay Kumar Singh (Director, CD), Prof. Devi Prasad Mishra (Coordinator), Prof. Ankush Galav (Co-Coordinator) , Prof. Ajeet Yadav, Banoo Jakkirriaah.

Standing (L to R) I st Row : S/Shri: Arjun Sham Sundar, Karnan Annamalai, Muralidher Gunasegaran, Rajarajan Kannan, Pradeep Chamoth Ramakrishnan, Someshwar Muralirajan, Anit Prakash, Venkata Aditya Bandaru, Murali Sekar, Rajesh Kumar Singh, Babu Kondai.

Standing (L to R) IInc Row : S/Shri: Vivek Murugan, Kesavan Mohanram, Karthick Mohandoss, Sreejith Sreedharan, Sriram Nagarajan, Anand Parameshwaran Neelakantan.

The Department of Mining Engineering, Indian Institute of Technology (Indian School of Mines), Dhanbad, successfully organized a six-day Executive Development Program (EDP) on "Mining Technology" for senior executives of Caterpillar Inc. from 8th to 13th December 2025. The program was designed as a focused industry–academia knowledge exchange platform, aiming to strengthen the interface between cutting-edge academic research and contemporary industrial practices in the mining sector.

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Professional Development Program on Latest Tunneling Techniques for NHPC Executives at IIT (ISM) Dhanbad

The Department of Mining Engineering, IIT (ISM) Dhanbad, successfully conducted a three-day Professional Development Program (PDP) on "Introduction to the Latest Tunneling Techniques" for executives of NHPC Limited from 22–24 December 2025. The programme aimed to bridge the gap between academic advancements and industry practices by familiarising participants with state-of-the-art tunneling methods and emerging technologies relevant to large-scale infrastructure and hydropower projects.

Sitting (L to R) : S/Shri: Prof. Ajeet Yadav, Arun Kumar, Ashwani Jain, Prof. Dondapati Gopi Krishna (Co-coordinator), Deepak Kumar, Prof. Dheeraj Kumar (Deputy Director), Prof. Keka Ojha (Dean CEP), Prof. Bhanwar Singh Choudhary (HOD & Coordinator), Prof. Bhaskara Behera, Prof. Arka Jyoti Das .

Standing (L to R) I[st] Row : S/Shri: Rontu Chowlu, Chandra Sekhar Panigrahi, Manoj Kumar, Lalit Narayan Yadav, Upendra Mani, Rameshwar Singh, Vidya Bhushan Prasad, Gaurav Kumar Singh, Chau Saikham Koth Chakhap, Vishambhar Dayal Garg.

Standing (L to R) II[nd] Row : S/Shri: Akhilesh Singh, Sujeet Kumar Mehta, Upendra Kumar Choudhary, Amar, Abhishek Bhatt, Ashish Saxena.

The technical sessions covered a wide spectrum of topics, including modern tunnel excavation techniques, mechanised and conventional tunneling systems, rock mass characterization, ground control measures, numerical modelling, monitoring and instrumentation, and safety and risk management in underground construction. Special emphasis was placed on recent innovations such as Tunnel Boring Machines (TBMs), New Austrian Tunnelling Method (NATM), and the integration of digital tools for design and performance assessment.

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Mine Survey Camp 2025: Practical Training in Modern Mine Surveying

The Mine Survey Camp 2025, conducted from 01 – 07 December 2025, was an integral part of the M.Tech. (Geomatics) curriculum of the Department of Mining Engineering, IIT (ISM) Dhanbad, aimed at providing hands-on exposure to contemporary mine surveying practices. The programme was organized under the leadership of Prof. Dheeraj Kumar and Prof. V. G. K. Villuri, with academic and technical support from Dr. Sunil Kumar, Mr. Dayamoy Karmakar, and Mr. Sudhanshu Pandey.

A total of 15 M.Tech. (Geomatics) students participated in the camp and carried out a detailed survey of the IIT (ISM) Dhanbad campus using advanced surveying instruments. The field training enabled students to gain practical experience in modern measurement techniques, data acquisition, and professional field procedures, while enhancing their technical competence, teamwork, and confidence.

The successful conduct of the camp reflects the department's continued commitment to integrating theoretical learning with practical application in the field of mine surveying and geomatics.

"Where learning meets the land — Survey Camp builds the foundation of real engineering."

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Industrial Mine Excursion for B.Tech. Students: Exposure to Contemporary Mining Practices

The Department of Mining Engineering organized an Industrial Mine Excursion for B.Tech. Fourth Semester students on 26–27 December 2025 to provide practical exposure to large-scale mining and mineral processing operations. The visit covered the Noamundi Iron Ore Mines of Tata Steel and the Narwapahar Mine and Mill of Jaduguda Uranium Limited.

A total of 87 students participated in the excursion. At Noamundi, students observed modern opencast mining practices, including drilling and blasting, heavy earth-moving machinery operations, and systematic ore handling, gaining insights into scientific mine planning, safety management, and sustainable mining practices. The visit to Narwapahar offered exposure to underground uranium mining, ore beneficiation processes, radiation safety protocols, and environmental protection measures.

The excursion enabled students to effectively link theoretical concepts with field practices through interactions with industry professionals, thereby enhancing their technical awareness and professional outlook. The initiative reflects the department's continued commitment to experiential learning and industry-oriented education.

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Bord & Pillar Training Gallery Visit

The Bord & Pillar Training Gallery was visited by distinguished guests including Shri M. Vellaipandi, Director General, STQC, MeitY, on 20 December 2025, and Shri U. K. Chaudhary, NHPC Limited, on 24 December 2025, along with Prof. Jaisingh Thangaraj, Associate Professor, Department of Electronics Engineering, IIT (ISM) Dhanbad. The visit offered an opportunity to observe and understand the practical aspects of the bord and pillar mining method, including excavation, roof support, ventilation, and safety procedures. Such experiential learning initiatives enhance the students' comprehension of theoretical concepts, strengthen their practical skills, and prepare them for professional challenges in underground mining environments.

The training gallery offered a controlled environment where students could connect classroom theory with real-world mining practices, enhancing their understanding of operational challenges, risk mitigation strategies, and equipment utilization in underground coal mining. Interactive sessions with instructors and technical staff allowed students to clarify concepts, discuss best practices, and gain insights into technological innovations employed in contemporary mining operations.

Such visits are an integral part of the Department's efforts to blend theoretical knowledge with practical skills, fostering industry-ready professionals equipped to handle the complexities of modern underground mining safely and efficiently.

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Longwall Training Gallery Visit

The Department of Mining Engineering organized a Longwall Training Gallery visit to provide practical exposure to advanced underground coal mining techniques. The visit enabled participants to observe the longwall mining system, including the operation of shearers, powered supports, conveyor systems, and roof control mechanisms, highlighting the integration of mechanization in modern mining practices.

Interactive sessions with technical staff allowed participants to understand operational challenges, technological innovations, and best practices in mechanized mining. The training gallery visit served as an experiential learning platform, bridging the gap between theoretical knowledge and real-world application, and enhancing students' preparedness for careers in safe, efficient, and technologically advanced underground mining operations.

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UMMEED 2025: International Conference and Exhibition on Underground Mining Mechanization and Automation

Eastern Coalfields Limited (ECL) is organizing UMMEED 2025, an International Conference and Exhibition on Underground Mining Mechanization and Automation, scheduled to be held from 19 – 20 December 2025. The event is being conducted in collaboration with the Indian Institute of Technology (Indian School of Mines), Dhanbad, under the aegis of the Directorate General of Mines Safety (DGMS)

The conference is being organized under the esteemed Chief Patronage of Shri Ujjwal Tah, Director General, DGMS; Shri Satish Jha, Chairman-cum-Managing Director, ECL; and Professor Sukumar Mishra, Director, IIT (ISM) Dhanbad. UMMEED 2025 has witnessed extensive participation from key stakeholders across the mining sector, including Corporate Joint Consultative Committee (JCC) Members, Corporate Safety Board Members, former Chairmen-cum-Managing Directors and Directors of Coal India subsidiaries, Area General Managers, and Heads of Departments and executives from various operational units of ECL. Such wide-ranging representation underscores the conference's strategic importance and strong industry relevance.

Through technical deliberations, technology exhibitions, and expert-led interactions, UMMEED 2025 serves as a vital forum for the dissemination of knowledge and best practices in underground mining. The conference continues to strengthen its role as a premier platform for innovation, collaboration, and policy-oriented dialogue, contributing meaningfully towards the advancement of safe, efficient, and sustainable underground mining practices.

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Research Publications & Projects

Research Publications

- *J. Khatti, S. Mishra, A. D. Skentou, and P. G. Asteris, "Metaheuristic-optimized XGBoost model for accurate prediction of rock fragmentation in mining projects," Transportation Geotechnics, vol. xx, Art. no. 101854, 2025, doi: 10.1016/j.trgeo.2025.101854.*
- *S. Gorain and A. Kumar, "A comprehensive review on application of self-healing concrete in enhancing durability and structural integrity of underground structures," J. Inst. Eng. India Ser. D, 2026, doi: 10.1007/s40033-026-00988-0.*
- *A. Kumar, D. Kumar, A. S. Gaur, S. Jana, and C. Paul, "Self-advancing goaf-edge support (SAGES): A solution to manage difficult roof conditions during continuous miner based mechanised extraction," in Proc. Int. Conf. & Exhibition on Underground Mining Mechanisation Enhancement & Emerging Dynamics (UMMEED 2025), 2025.*
- *N. K. Katariya and B. S. Choudhary, "Optimization of resource extraction with slope stability: Sustainable deepening practices in open-pit iron ore mining," Journal of Mining and Environment, 2025, doi: 10.22044/jme.2025.15232.2914.*

Research & Consultancy Projects

- *Prof. Ashok Kumar has been awarded a research and development project titled "Assessment of Stand-Up Time of Freshly Exposed Unsupported Overlying Strata for Safe Working with Continuous Miner Technology in Indian Coalfields." The project is funded by the Anusandhan National Research Foundation (ANRF) under its Advanced Research Grant (ARG) programme.*

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Spotlight: Dr. Arka Jyoti Das Joined as Assistant Professor

The Department of Mining Engineering, IIT (ISM) Dhanbad, warmly welcomes Dr. Arka Jyoti Das, who joined the department as an Assistant Professor on 11 December 2025.

Dr. Das brings over twelve years of extensive professional and research experience, with significant contributions during his tenure at CSIR–Central Institute of Mining and Fuel Research (CIMFR). His experience includes participation in seven sponsored R&D projects and more than seventy industry-sponsored consultancy assignments, demonstrating a strong integration of research with practical mining applications. He also possesses valuable underground mining experience with Coal India Limited, including exposure to Continuous Miner and Longwall operations at the Jhanjra Project of Eastern Coalfields Limited.

An All India Rank 1 holder in GATE 2012, Dr. Das earned his B.E. degree from IIEST Shibpur, M.Tech. from AcSIR, and Ph.D. from IIT (ISM) Dhanbad. His academic profile includes over 50 publications in reputed journals and conferences, authorship of a technical book, and patents in the field of mining engineering.

Dr. Das has been the recipient of several prestigious awards, including the INAE Young Associate Award (2024), Young Engineer Award (2022), and IMTR Award (2020). His research interests cover advanced underground and surface mining technologies, rock mechanics, numerical modelling, ground control systems and mine instrumentation.

The Department looks forward to Dr. Das's contributions to teaching, research and industry collaboration, and anticipates that his expertise will further enhance the department's academic and research strengths.

Achievements

Faculty Achievement: Prof. Ashok Kumar Receives IMTR Award 2024 for Outstanding Research Excellence

Prof. Ashok Kumar has been conferred with the Inder Mohan Thapar Research (IMTR) Award for the Year 2024 in recognition of his outstanding excellence in research publications during the calendar year 2025. This prestigious award acknowledges his significant scholarly contributions, high-impact research output and sustained commitment to advancing knowledge in his field. The recognition reflects Prof. Kumar's dedication to academic excellence and research leadership, and it brings distinction to the Department through his continued contributions to high-quality research and innovation.

Staff Achievement: Mr. Subham Kumar Promoted to Senior Technician

The Department is pleased to announce the promotion of Mr. Subham Kumar from Junior Technician to Senior Technician in recognition of his consistent dedication, technical proficiency, and valuable contributions to departmental operations. This advancement reflects his commitment to excellence and professional growth within the Department.

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Ph.D. Awarded

- ***Mr. Tanmay Das Gupta (18DP0006) has been awarded the Ph.D. degree for his thesis entitled "A Novel Method for Assessment of Thermal Stability and Spontaneous Combustion Kinetics of Coal" under the supervision of Prof. D. P. Mishra, Professor, Department of Mining Engineering, IIT (ISM) Dhanbad. His research focused on developing an innovative methodology to evaluate the thermal behaviour and spontaneous combustion characteristics of coal, contributing to safer and more efficient coal handling and storage practices.***

- ***Mr. Vislavath Suresh (21DR0217) successfully defended his Ph.D. thesis entitled "Cyber-Physical Systems for Air Pollution Monitoring in Surface Coal Mines Using Low-Cost Sensors: A Sustainable Development Approach" under the guidance of Prof. Siddhartha Agarwal, Assistant Professor, Department of Mining Engineering, IIT (ISM) Dhanbad. His research focused on the development and implementation of cyber-physical systems integrated with low-cost sensor networks for real-time air quality monitoring in surface coal mining environments, emphasizing sustainable mining practices and environmental safety.***

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Faculty Profile of the Department

Prof. V M S R Murthy
Professor (HAG) On Deputation As Director IIEST Shibpur
Research Interest:
Rock Excavation Engineering

Prof. Arvind Kumar Mishra
Professor (HAG) On Deputation As Director CIMFR
Research Interest:
Explosive Engineering, Rock Blasting Technology, Rock Excavation Engineering, Opencast Mining

Prof. Dheeraj Kumar
Professor (HAG)
Research Interest:
Digital Mining Technologies, Mine Surveying & Geospatial Technologies

Prof. R M Bhattacharjee
Professor
Research Interest:
Underground Coal Mining Technology, Risk Assessment And Safety Management, Emergency Response & Disaster Management, Accident Investigation, Mine Fire And Explosion

Prof. Devi Prasad Mishra
Professor
Research Interest:
Mine Ventilationand Environmental Engineering, Mine Fire And Explosion, Application of CFD In Mine Ventilation and Environmental Engineering, Methane Drainage/CBM/UCG, Stowing/backfilling With Fly Ash/pond Ash, Characterization of Fly Ash/pond Ash

Prof. Bhanwar Singh Choudhary
Professor
Research Interest:
Drilling & Blasting Technology, Underground Metal Mines, Computer Aided Mine Planning, Tunnel Engineering

Prof. Partha Sarathi Paul
Professor
ResearchInterest:
Core Mining Discipline:Mine Safety Engineering; Occupational Health, Safety And Ergonomics; Applied Multivariate Modeling And ML Techniques; Rock Mechanics; Mine Ventilation. Interdisciplinary: Automation For Workplace Safety; Socio-economic Impact Of Mining

Prof. Anindya Sinha
Professorof Practice
Research Interest:
Mine Planning & Design, Mine Environment Planning & Management, Mine Mechanization & Digitization

Prof. Rabindra Kumar Sinha
Associate Professor
Research Interest:
Design of Structures in Rock, In situ Rock Mechanics Investigations, Numerical Modelling

Prof. Vasanta Govind Kumar Villuri
Associate Professor
Research Interest:
Photogrammetry, Cartography, Remote Sensing, GIS And GPS

Prof. Radhakanta Koner
Associate Professor
Research Interest:
Mine Automation, Data Analytics, Georesources Utilization Using Remote Sensing Technology, Slope Stability Analysis, Landslide Analysis, Wireless Sensing Technology, Real-time Monitoring System In Mining

Prof. Patitapaban Sahu
Associate Professor
Research Interest:
Mine Ventilation,Sub-Surface Enviornmental Engineering,Mine Radiation,CBM and Data Analytics In Mining

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Faculty Profile of the Department

Prof. Gnananandh Budi

Assistant Professor
Research Interest:
Rock Mechanics And Ground Control

Prof. Kashinath Pal
Assistant Professor
Research Interest:
Rock Mechanics, Groundwater, Slope Stability

Prof. Mohammad Soyeb Alam

Assistant Professor
Research Interest:
Geospatial Technology In Mining, Underground Metal Mining, Mine Subsidence Studies, Mine Slope Stability Analysis, Mine Surveying

Prof. Siddhartha Agarwal
Assistant Professor

Research Interest:
Digitalizationof MiningOperations, Industry 4.0 Applications In Mining, Machine Learning And Artificial Intelligence Applications In Energy Consumption In Mines, Earth Sciences: Geostatistics, Open Pit Mine Planning & Scheduling, Real Time Monitoring Of Air Pollution In Open Cast Mines, Geo-technical And Environmental Closure And Repurposing Planning

Prof. Swapnil Mishra
Assistant Professor
Research Interest:
Blast Resistant Design of Underground Structures, In- situ Stresses Surrounding Underground Structures, Impact Testing on Weak and Weathered Rock Conditions, Ground Subsidence, Rock Dynamics and Material Testing, Physical Modelling

Prof. Ashok Kumar
Assistant Professor
Research Interest:
Underground Mining Methods, Strata/Rock Mechanics, Numerical Modeling, Underground Instrumentation And Monitoring Of Strata, Support Design, Rockmass Characterisation, Excavation Methods For Tunnels & Caverns, Drilling & Blasting, Operations Research, Mine Environment, Surface Mining

Prof. Dondapati Gopi Krishna

Assistant Professor
Research Interest: Rock Mechanics, Numerical Modeling in Geotechnical Engineering, Coal Mining, Mine Instrumentation and Monitoring

Prof. Bhaskara Behera
Assistant Professor
Research Interest:
Rock Mechanics And Ground Control, Mining Methods, Numerical Methods In Geomechanics, Mine Planning
And Design

Prof. Ajeet Yadav
Assistant Professor

Research Interest:
Rock Mechanics and Ground Control, Mining Methods, Mine Ventilation, Numerical Modelling

Prof. Ankush Galav
Assistant Professor
ResearchInterest:
Rock Mechanics and Ground Control, Mining Methods, Rock Excavation Engineering, Numerical Modelling, Mine Planning and Design, Mine Instrumentation and Monitoring

Prof. Santosh Kumar Behera
Assistant Professor
Research Interest:
Paste backfilling, underground metal mining, underground metal mine backfilling, underground coal mine stowing and associated mining methods, fly ash filling in opencast mines, and slope stability.

Prof. Maitreya Mohan Sahoo
Assistant Professor
Research Interest:
Remote Sensing, Geographical Information System, Geoinformatics, Digital Image Processing, Geological Spectroscopy, Hyperspectral Mixing and Unmixing, Super-Resolution, Digital Twin Technology, Artificial Intelligence

2025 CALENDAR

JANUARY

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FEBRUARY

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

MARCH

M	T	W	T	F	S	S
31					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

APRIL

M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

MAY

M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JUNE

M	T	W	T	F	S	S
30						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

JULY

M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

AUGUST

M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

OCTOBER

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

2025 Calendar of Important Mining Days

4th April : International Day for Mine Awareness and Assistance in Mine Action
22nd April : World Earth Day
1st May : International Labour Day
4th May : Coal Miners Day
23rd June : International Women in Engineering Day
30th October : Mine Rescue Day
1st November : Coal India Foundation Day
1st November : Indian Mining Day
5th December : World Soil Day
03rd to 8th December : Centenary Week
9th December : Foundation Day
11th December : International Mountain Day
14th December : National Energy Conservation Day