



# **C**HALLENGES IN **S**AFETY AND **E**NVIRONMENTAL **M**ANAGEMENT IN **M**INES

75  
Azadi Ka  
Amrit Mahotsav

**2022**  
June 17-19, 2022

Organized by  
**Department of Mining Engineering**  
NIT Rourkela

## About the Conference

Increased mechanization and implementation of advanced technologies have put greater focus on safety and environmental management in mines. To deliberate on this, the Department of Mining Engineering at NIT Rourkela is organising a Conference on **Challenges in Safety and Environmental Management in Mines (CSEMM – 2022)** during June 17-19 **2022**. The Conference has been planned with the objective of bringing together industry leaders, practicing mining engineers, regulators, academicians and researchers to exchange and share their experiences and research results on all aspects of the Mine safety, environment and health at a common platform. It also aims to provide an interdisciplinary platform to present and discuss the most recent innovations, trends, concerns as well as practical challenges encountered and solutions adopted in this field.

## About the Institute

National Institute of Technology Rourkela (NITR), formerly Regional Engineering College Rourkela (REC Rourkela), established in 1961, is one of the premier national level institutions for technical education in the country and is funded by the Government of India. Our academic programme is amongst the best in the country. It provides an optimum mix of theory and practical, with strong bias on industrial applications. NIT Rourkela is presently ranked the 3rd best NIT and 20th nationwide (including IITs) by the Ministry of Education. The campus has all the amenities for developing academic, personal and social skills of young people. NIT Rourkela is a well-known technical institute of national importance serving as a knowledge hub to the nation with 20 departments awarding graduate and post graduate degrees including Ph.D. in Engineering, Science, Planning and Architecture, Management, and Humanities. The campus of the institute spread over an area of 262 hectares of land is surrounded by scenic hills providing a spectacular rejuvenating atmosphere which is very conducive for education and research. The well maintained green campus of the Institute provides accommodation to all students, faculties, and staffs. The greenery and flowers in the campus further make the stay very pleasant and enjoyable.

## About the Department

The Department of Mining Engineering at NIT Rourkela was established in 1979 in the midst of coal and mineral belt with a vision to become a global leader of higher learning in the field of eco-friendly exploitation and utilization of mineral resources for the welfare of the society and to be a preferred destination for undergraduate and graduate studies. The Department specializes in Mining Technology, Geomechanics and Strata Control, Mine Environment and Safety Engineering, Clean Coal Technology, Application of GIS and remote Sensing in Mining, Computer Application in Mining, Mine Planning, Mine Surveying etc. It boasts modern and sophisticated equipment for physical experimentation viz. DTA, AAS, Computer Controlled Compression Testing Machine, Ultrasonic Testing Machine, Rheometer, Gas Chromatograph, Digital Bomb Calorimeter, UV-visible Spectrophotometer, GPS, Total Station etc. It also has the latest computing facilities with state-of-the-art software like Surpac, RocScience, Flac 2D & 3D, Udec, Galena, Labview, Ventsim, Petrasim, Whittle, ArcGIS etc. The faculties regularly interact with industries and Government, and offer technical solutions to various problem faced by them. The faculty members are part of the different Expert and Technical Committees constituted for policy formulation and technical evaluation for mining industry. The Department frequently conducts continuing education programmes for the benefit of the professionals from industry and other academic, research and government regulatory organisations representing both national and international level. The current research focus of the Department includes coal mining technology, slope stability, development of alternative haul road material, fly ash management, improvement of air and water quality, spontaneous heating of coal and mine fires, modelling of coal bed methane, cumulative environmental impact assessment, and mine systems reliability.



## Important Dates

● Submission of Abstract	April 23, 2022
● Acceptance of Abstract	April 30, 2022
● Submission of Full Paper	May 15, 2022
● Acceptance of Full Paper	May 30, 2022

## Call for Papers

Interested Research Scholars, Faculty members, Scientists and Engineers working in Research Institutes, Universities, Colleges and Industries are invited to submit research articles, case studies, and technical papers for the conference. All papers will undergo a peer review process before selection. **Selected high quality papers will be published in Scopus indexed journal.**

## Conference Themes

- Safety, risk assessment and related management issues
- Belowground communication and tracking system
- Ground control practices including slope stability
- Machinery, equipment and modernisation
- Application of soft computing and IoT in Mining
- Modelling, simulation and innovation
- Smart and Digital mining
- Instrumentation and monitoring in mines
- Legislation and policy issues in mining
- Safe Drilling & blasting practices
- Current and emerging health Issues
- Environmental monitoring and control
- Particulate matter generation, transport and control
- Mine ventilation and network modeling
- GIS and remote sensing applications in mining
- Spontaneous combustion and mine fires
- Waste management in mining
- Rehabilitation and closure
- Sustainable mining practices
- Climate change & decarbonizing the mining industry

## Paper Submission Guidelines

The authors are requested to submit the extended abstracts in MS Word format and full text paper (post-acceptance of abstract) as per the guidelines given in website:  
<http://csemm.nitrkl.ac.in/>  
 Acceptance of abstract will be notified after due review by the technical committee.

## Registration Fee

It is mandatory for at least one author of an accepted paper to register in order to enable the same to be included in the technical presentation and proceedings of the conference.

● Delegates from Industries/Govt. Agency	₹ 10,000
● Academic/ Research Institutes	₹ 8,000
● Research Scholars	₹ 3,000

## Sponsorship

Industries, R&D Institutes, Mine Operators, Government and Non-Government organizations are requested to sponsor this strategic conference and depute delegates. The sponsor's logo and name will appear in all promotional materials including Conference banners, souvenir and website. The sponsors' will also get opportunities to distribute publicity materials in conference kits.

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## Speakers



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Director, NITR



Er Prabhat Kumar  
Director General,  
DGMS



Prof. A. Bhattacharjee  
IIT Kharagpur



Er D.B. Sundara Ramam  
VP, Raw Materials  
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Prof. Gurdeep Singh  
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Prof. H.B. Sahu, Professor & HOD, Mining Engg.

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Prof. Tushar Gupta, Prof. F. Sarkar and Prof. M. K. Shriwas

All correspondence may be addressed to:

Dr. Himanshu Bhushan Sahu  
Dept of Mining Engineering  
NIT Rourkela – 769008, India  
Phone: 91-661-2462606 (O)  
Fax: 91-661-2462999  
Email: [csemm2022@nitrkl.ac.in](mailto:csemm2022@nitrkl.ac.in), [hbsahu@nitrkl.ac.in](mailto:hbsahu@nitrkl.ac.in)

Address

Dept. of Mining Engineering  
National Institute of Technology  
Rourkela – 769008, India



visit us at

[csemm.nitrkl.ac.in](http://csemm.nitrkl.ac.in)