



### **Objective**

The rapid pace of technological advancement has led us to revitalize our strategy for addressing the sustainability issues in mining sector. This virtual conference will provide a platform for knowledge dissemination and understanding in recent advancement in mining technology and management towards sustainability.

### **Theme**

Sustainable mining is the need of the hour in the global mining industry, which will be technology-driven with AI and ML as the underpinnings. Mining will be sustainable when it operates in harmony with society and the environment. In the wake of recent advancement in IT and digitalization, current challenge of mining sector is to implement Mining 4.0 with focus on circular economy and sustainability. In order to address this challenge, the global mining industry will have to be flexibly built around innovative systems with focus on smart technologies aiming to develop autonomous mining system for energy-efficient, clean technologies that contribute to bulk production with due care to sustainability by waste minimization and waste re-use in an environmentally responsible manner. It is pertinent to mention that ecological impact of underground mining is insignificant compared to opencast mining and there is a need to refocus on underground mining. At the same time, mining sector needs to be sustainable with substantial improvement in addressing social, environmental and economic aspects with the due thrust on shift towards decarbonization and NetZero mining. This International Webinar will enable deliberation and dissemination of knowledge, practices and solutions on various environmental and social issues in mining focusing on improvement in sustainability framework and responsible mining. It is expected that the fruitful discussion in the workshop would lead to positive outcome which will not only benefit the mining industry but also community living around the mining area, in particular and the nation, in general.

## Programme

09.15 – 10.00	Opening Plenary Session <ul style="list-style-type: none"><li>• Welcome Address: Prof. Rajiv Shekhar, Director, IIT (ISM) Dhanbad</li><li>• Inaugural Address: Mr. Pramod Agrawal, Chairman-Cum-Managing Director, Coal India Limited</li></ul>
	Technical Sessions Moderator: <ul style="list-style-type: none"><li>• Mr. P.S. Mishra, Chairman-Cum-Managing Director, Eastern Coalfields Limited</li></ul> Co-Moderator: <ul style="list-style-type: none"><li>• Prof. Dheeraj Kumar, Project Director, TexMin Hub</li></ul>
10.00 – 10.45	Session I: Sustainable Mining and Community Engagement with Prof. John Craynon, Department of Mining, West Virginia University, USA
10.45 – 11.30	Session II: Green Technology for Sustainable Mining with Ms. Mary Puleo, Management Consultant, Accenture, Colorado, USA
11.30 – 12.15	Session III: Responsible Mining with Prof. Neville Plint, Director, Sustainable Mineral Institute, University of Queensland, Australia
12.15 – 12.45	Session IV: Mining of the future: NetZero Mining for Sustainability with Prof. Arvind K. Mishra, Head of the Department, Mining Engineering, IIT (ISM) Dhanbad
12.45 – 13.15	Session V: Leveraging AI for Sustainable Mining with Dr Sanjay Prasad, CTO & Distinguished Engineer, Industrial Products, IBM
13.15 – 14.30	Lunch Break
14.30 – 15.15	Session VI: Thrust on Coal Production from Underground Mining, Agenda for Action with Prof. R. M. Bhattacharjee, Professor & Dean (IRAA), IIT (ISM), Dhanbad
15.15 – 16:00	Session VII: Automation and Digitalization for Sustainable Mining with Mr. Sanjeev Kumar, Vice President, Automation, Sandvik Mining and Rock Technology India Pvt. Ltd.
16.00 – 17.30	Concluding Plenary Session with <ul style="list-style-type: none"><li>• Mr. Binay Dayal, Director (Technical), Coal India Limited: Chairman</li><li>• Mr. P.S. Mishra, Chairman-Cum-Managing Director, Eastern Coalfields Limited</li><li>• Mr. D B Sundara Ramam, Vice President, Raw Material, Tata Steel</li><li>• Mr. Uma Shanker, Senior VP, Adani Group, India Coal Mining</li></ul>

## Participation

The conference aims at participation of mining engineers, excavation engineers, executives from mining and allied sectors from different organizations through a virtual platform to exchange knowledge and experiences regarding best practices in Mining.