



**IIT (ISM)  
DHANBAD**  
1926-2026  
EXCELLENCE IN EDUCATION & RESEARCH

# International Workshop on Air Quality Monitoring and Data Analysis



February 14-15, 2026

Venue: IIT(ISM) Dhanbad



Jointly Organized by :



Department of Environmental Science and Engineering  
Indian Institute of Technology (Indian School of Mines), Dhanbad



IIT (ISM)  
**TEXMiN**

TEXMiN Foundation, IIT (ISM) Dhanbad



EIACP (PC-RP), IIT (ISM) Dhanbad

## About The Workshop

Air quality monitoring has become important over the last two decades and its importance continues to grow. The goal of this workshop is to transfer state-of-the-art information on measurement principles, available instrumentation and their limitations, data analysis methodologies, and global challenges and opportunities. It will focus on measurements both in surface and subsurface facilities such as mines, tunnels, and industrial facilities. One of the major goals is to nurture students and young professionals in this topical area. We hope to provide a strong learning environment for academic professionals, students, field engineers, researchers, policy makers and regulators to advance the state-of-the-art. It is being organized in collaboration with an informal International Air Quality Monitoring Group spearheaded by Professor Y. P. Chugh, Professor Emeritus, Southern Illinois University, USA. Currently, the group has representatives from India, China, Australia, Poland, Canada, and USA. **It is proposed to publish workshop proceedings as a peer-reviewed document.**

## Content

- **Fundamentals of Air Quality Measurement and Reporting**  
Understand core principles and techniques used in capturing air quality data.
- **Scientific Concepts Behind Measurement of Key Air Quality Parameters**  
Explore the methodologies behind measuring pollutants like PM<sub>2.5</sub>, NO<sub>x</sub>, SO<sub>2</sub>, CO, and more.
- **Monitoring Air Quality in Surface and Subsurface Environments**  
Gain insights into strategies for both ambient and indoor/underground monitoring.
- **Data Analysis Techniques: Current Practices and Future Improvements**  
Review existing analytical tools, identify gaps, and explore areas for methodological improvement.
- **Digital Integration in Air Quality Monitoring**  
Learn how IoT, AI, and remote sensing are transforming air quality measurement. And data analysis
- **Overview of Existing Air Quality Regulations**  
Examine national and international policies guiding air quality standards and reporting.
- **Instrument Demonstration and Practical Training**  
Hands-on sessions with advanced air quality instruments, including real-time data collection and interpretation.
- **Case Studies from Air-Quality Monitoring Projects**  
Analyse field-based success stories and challenges in air quality management.
- **Interactive Open Discussions and Q&A**  
Share perspectives, raise questions, and collaborate on innovative solutions.

## Suggested Participants

- **Industry: Mining, Thermal, Steel and other**
- **Faculty, Professional Researchers**
- **Enforcement Professionals**
- **Government and Policy Professionals**
- **Undergraduate, Graduate Students and Research Scholars**

## About IIT (ISM) Dhanbad

Nestled in the heart of India's mineral-rich region, approximately 260 km from Kolkata, the Indian Institute of Technology (Indian School of Mines), Dhanbad, is one of the country's most prestigious and historic mining institutions. Established in 1926 to meet the nation's growing demand for expertise in mining and applied geology, the institute has since evolved into a multidisciplinary hub of research, innovation, and education. It was granted IIT status in 2016, thereby joining the ranks of India's most elite technical institutes.

## About the Department

The Department of Environmental Science and Engineering at IIT(ISM) Dhanbad was established in 2007, evolving from the Centre of Mining Environment. It pioneered the first B.Tech program in India in Environmental Engineering through IIT-JEE, and now also offers M.Tech and Ph.D programs in the discipline. Renowned for its academic rigor and strong industry relevance, the department's graduates are well-placed in top organizations such as CIL, NTPC, L&T, BALCO, NALCO, HZL, and key regulatory bodies like MoEF&CC, CPCB, and SPCBs, along with leading research labs, academic institutes, consulting groups, and NGOs. With state-of-the-art research facilities, ISO 9001 and OHSAS 18001 certifications, and a focus on quality, safety, and sustainability, the department is committed to advancing knowledge, fostering innovation, and addressing pressing environmental challenges through education, research, and capacity building.

## For Nomination

Each Organization is requested to nominate a few officers to participate in this workshop. The nomination letter should reach the convener on or before January 10, 2026, via e-mail or post, along with the workshop fee through DD/RTGS/UPI.

## About the Venue

IIT(ISM) Dhanbad is situated in the heart of Dhanbad City. Dhanbad is often referred to as the "Coal Capital of India" due to its rich coal reserves. The city and its surrounding areas are home to numerous coal mines, making it a significant hub for coal production in the country. The weather in Dhanbad is very pleasant during February.

## How to Reach IIT (ISM), Dhanbad

**By Train:** Dhanbad Junction Railway Station, located just 2.8 km from the IIT (ISM) Campus, is the nearest railway station. **By Air:** The nearest public airports to Dhanbad are: Kazi Nazrul Islam Airport, Durgapur (85 km), Birsa Munda Airport, Ranchi (140 km), Deoghar International Airport, Deoghar (110 km), Netaji Subhas Chandra Bose International Airport, Kolkata (269 km).

## Registration

Registration fee includes access to all sessions, registration kit, breakfast, high tea, working lunch, cultural program, and gala dinner. A participation certificate will be provided to all attendees.

Registration fee (Including GST @ 18%)	INR	USD
Students/Research Scholars	3000	100
Faculty & Scientists	6000	200
Industry Professionals	12000	300

## Accommodation

Accommodation for participants will be arranged on a first-come, first-served and payment basis at the IIT(ISM) Guest House, subject to availability. Participants may also opt to book rooms independently at hotels in Dhanbad city, as per their convenience.

## Sponsorship

DIAMOND SPONSOR	INR 1,00,000/- (4 delegates free of cost)
GOLD SPONSOR	INR 75,000/- (3 delegates free of cost)
SILVER SPONSOR	INR 50,000/- (2 delegates free of cost)

## Important Dates

Last date for registration	January 10, 2026
International Workshop	February 14-15, 2026

## Fee Payment Instructions

The registration fee is to be paid via Net Banking, DD or UPI to the account mentioned below. After payment registration can also be done via the given Google link. Please send the transaction details after the registration via e-mail: aqmda@iitism.ac.in

## Registration Link

<https://docs.google.com/forms/d/1FN1KVn4cGjHG5lHam7w3VS3yM8jizrXtAXphiaaznA/edit?ts=68a410d3>

### Net Banking

**Name:** IIT(ISM) SPECIAL FUND  
**A/C no:** 0986101024892  
**IFSC:** CNRB0000986  
**Bank Name:** Canara Bank  
**Branch:** Saraidhela Branch, Dhanbad  
**MICR code:** 826015003  
**GSTIN:** 20AAAI0686D1ZA

### UPI



## Technical Advisors

Prof. Gurdeep Singh, NORMI Research Foundation, New Delhi  
Prof. A K Patra, IIT Kharagpur  
Prof. Brajesh Kr. Dubey, IIT Kharagpur  
Prof. Sagnik Dey, IIT Delhi  
Prof Mukesh Sharma, IIT Kanpur

Prof. Mukesh Khare, IIT Delhi  
Prof. Virendra Sethi, IIT Bombay  
Prof A K Keshari, IIT Delhi  
Mr. Sharath Kr. Palleria, MoEF CC

## Organizing Team at IIT(ISM) Dhanbad

Prof. Alok Sinha, HOD/ESE, IIT(ISM)  
Prof. Suresh Pandian Elumalai, ESE, IIT(ISM)  
Prof. Saifi Izhar, ESE, IIT(ISM)  
Prof. Vittal H, ESE, IIT(ISM)  
Prof. Madhumita Patel, ESE, IIT(ISM)  
Prof. Riya Dutta, ESE, IIT(ISM)  
Mr. Bishwajit Das, EIACP (PC-RP), IIT(ISM)  
Dr. Avantika Chandra, EIACP (PC-RP), IIT(ISM)

Mr. Wilson Kandulna, IIT(ISM)  
Ms. Swadha Pandey IIT(ISM)  
Ms. Smriti Zenifer Lakra, IIT(ISM)  
Mr. Parth Banethiwal, IIT(ISM)  
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Mr. Shashank, IIT(ISM)  
Ms. Aparna, IIT(ISM)

## Organizers & Contact

### Convener

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### Prof. Y. P. Chugh

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### Co-Convener

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For any further information:

**For Registration:** Mr. Akhand Pratap Singh (M. 6307956336)

**For Accommodation:** Mr. Parth Banethiwal (M. 8114475818)

**Department of Environmental Science and Engineering**  
Indian Institute of Technology (Indian School of Mines), Dhanbad-826004  
Workshop e-mail: aqmda@iitism.ac.in

# Registration Form



## International Workshop on Air Quality Monitoring and Data Analysis



February 14-15, 2026

1. Name (in block letters): .....
2. Affiliation: .....
3. Postal Address: .....
4. Tel: ..... Fax: .....
5. Email: .....
6. Details of Registration Fees  
Demand Draft No. .... Date: .....  
Amount: .....
8. Additional information, if any: .....

### Organizers & Contact

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