

Five Days Online Course/Web Training  
under  
**Continuing Education Program of IIT Kharagpur**  
on  
**RISK ASSESSMENT OF OCCUPATIONAL EXPOSURE TO  
NOISE AND VIBRATION IN MINES**

(September 22-26, 2020)

**Organized by Department of Mining Engineering, IIT Kharagpur**

The unprecedented COVID-19 pandemic has adversely affected every sphere of life including the Mining industry. It has disrupted the usual industrial operations and there is no certainty when things will become normal. Even in these tough and challenging times of lockdown and social distancing, mining operations should continue to support the economy and life in general. Our concern for safety and occupational health of miners has become more important and relevant in the current scenario.

We draw your attention to **occupational exposure to noise** due to deployment of mining machinery and plant operations. This is considered as major health hazard affecting millions of mine workers as well as the residential areas in and around the mining complexes. Noise Induced Hearing Loss (NIHL) is also considered now as Notified Disease under Section 25 of the Mines Act, 1952. On the other hand, operators of earth-moving machines are regularly exposed to harmful **whole-body vibration** (WBV). Many of them (~85% in one study) are already suffering from LBP (low-back pain). In mining operations there can be a combination of relatively high intensity of vibration and long exposure durations at work. Effective risk mitigation requires understanding of the main aspects of a risk that pose a hazard to health.

Directorate General of Mines Safety (DGMS) has circulated the Recommendations of X<sup>th</sup> and XI<sup>th</sup> Conferences on Safety in Mines wherein Noise Mapping in mines and Vibration studies of mining equipment have been made mandatory. Not only for **statutory compliance** but also for serving the mining community in a better way, the mines require enhancement of theoretical and practical knowledge in these fields. In view of the above and considering the situation due to the pandemic, Department of Mining Engineering IIT Kharagpur is organizing a 5-days online course/Web Training on ***Risk Assessment of Occupational Exposure to Noise and Vibration*** which is specially designed for ***Indian mines***.

### **Objectives**

- To develop knowledgeable and trained manpower within the mining industry for Noise and Human Vibration monitoring and health risk assessment
- To disseminate knowledge on Noise Mapping software and technologies for application in mining projects.

### **The following broad areas will be covered in the course:**

- Impact of noise on mining and surrounding areas
- Area noise monitoring and personal noise dosimetry in mines
- Noise Mapping in mines: World best practices
- Whole-body vibration: assessing health risks as per ISO Standards
- Introduction to Noise Mapping theories and best international practices
- Online interactive demonstration on noise monitoring, noise mapping (Equipment & Software)
- Online interactive demonstration on equipment vibration instrumentation and data analysis

The online course will be conducted during **September 22-26, 2020** from 10:00AM to 5:00PM with lunch and tea breaks preferably through **Google Meet**. Video recordings of lectures with practical demonstrations, soft copy of the course materials and **Certificate of Participation** will be emailed to the registered participants. The effectiveness of this online course will be evaluated through **two online examinations** (short question/MCQ type) of the participants.

### Course fee and How to Apply:

The fee of this online programme is Rs. 15,000.00 per participant. GST @18% will have to be paid as per GoI rules.

Use the link: (<https://erp.iitkgp.ac.in/CEP/courses.htm>) to apply ONLINE



**(The detailed procedure for applying through IIT Kharagpur online course registration portal is enclosed along with this brochure)**

[The fees should be paid by following the steps as mentioned above by electronic money transfer to “CEP STC IIT Kharagpur” to the account number 95562200002955 of Syndicate Bank at Branch SRIC IIT Kharagpur (IFSC Code SYNB0009556)].

**Alternatively, please email the list of the participants, their designations, valid email address and mobile numbers as early as possible (preferably on or before 18.09.2020).**

*The link for participation and password will be emailed to the registered/nominated participants.*

### Address for Communication

For any other information, please contact:

**Prof. Bibhuti Bhusan Mandal**  
(Course Coordinator)

Department of Mining Engineering  
IIT Kharagpur-721 302

Phone: +91-3222-304822, Mobile: +91-9423638180/7972924672

Email: [bbmandal@mining.iitkgp.ac.in](mailto:bbmandal@mining.iitkgp.ac.in); [bbmandal@gmail.com](mailto:bbmandal@gmail.com)

### Department of Mining Engineering, IIT Kharagpur

Set up in 1956, Department of Mining Engineering has steadily grown as one of the best mining education centre in the country. Besides offering regular undergraduate, postgraduate, and doctoral courses in mining engineering, it is actively involved in short term courses and sponsored research activities in the areas of Rock Mechanics and Ground Controls, Mining Machinery, Mine Safety and Reliability, Underground and Surface Environment, Mine Fire and Explosions, Geometrics and Remote Sensing, Technology and Productivity, Mining Acts and Regulations, Land use planning, Mine Closure Planning, etc. The department believes in strong interaction with mining and mineral industry. Every year hundreds of executives from the industry are benefitted from important short term courses organized by the department.

## Continuing Education Programme (CEP)

Indian Institute of Technology Kharagpur

### Procedure for applying through IIT Kharagpur online course registration portal

**Use the link:** <https://erp.iitkgp.ac.in/CEP/courses.htm>

Steps to be followed:

1. Sign-Up
2. Verify your email-id (link will be sent to your e-mail)
3. Login
4. Edit Profile(Fill up all the mandatory fields, upload photo and signature)
5. Click on 'APPLY NOW' button.
6. Upload your **.pdf** format id-card (if necessary).
7. Payment Gateway activated

\*\*\* An e-mail will be communicated from Principal Coordinator/Convenor/Organiser, IIT Kharagpur to the shortlisted applicants stating the payment procedure.

\*\*\* This is a one time sign up process for applying through IIT Kharagpur online course registration portal. You can apply for any other programme using the same Login-id and Password.



For any help please call @ the following help-line numbers:(0)-3222-269626

or Email us: [cep\\_erp@iitkgp.ac.in](mailto:cep_erp@iitkgp.ac.in)