MINING ENGINEERING DEPARTMENT

The Department of Mining Engineering at IIT Kharagpur started in 1956 with the first batch of B.Tech students. It has played a pioneering role in the introduction of modern mining engineering curriculum in India. The faculty members are reputed for writing text books, publishing international journal papers, and actively involving themselves in industrial consultancy and short term courses.

SPONSORED PARTICIPANTS

The course fee is Rs.18,000/- per participant which will include course material. As per GOI, GST of 18% will be applicable on the registration fee.

MODE OF PAYMENT

Option 1: Demand Draft

Demand Draft in favour of "CEP-STC, IIT Kharagpur", payable at any bank in Kharagpur should be sent by post to the Course Coordinator

Option 2: Electronic Transfer

Name of Bank: Syndicate Bank,
SRIC, IIT Kharagpur 721302;
Name of Account:
CEP-STC, IIT KHARAGPUR
Account No: 95562200002955
RTGS No: SYNB0009556

CONTACT ADDRESS

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EMERGING TECHNOLOGIES ON OCCUPATIONAL SAFETY AND HEALTH IN MINES INCLUDING AUTOMATION AND DIGITIZATION

Short Term Course through virtual mode (Online) MAY 17-21, 2021

Coordinator
Professor Ashis Bhattacherjee

Organized by

Department of Mining Engineering
Indian Institute of Technology Kharagpur

Short Term Course on

EMERGING TECHNOLOGIES ON OCCUPATIONAL SAFETY AND HEALTH IN MINES INCLUDING AUTOMATION AND DIGITIZATION

MAY 17-21, 2021

INTRODUCTION

Mining has been and continues to be an industry where the concern for miners' safety is of great importance. Even though the mining industry in India has experienced a considerable improvement in the reduction of accident rates in underground and surface mines, further reduction of accident rates is necessary. In general safety problems in mining and allied industry in terms of the reduction of accidents and injuries are usually addressed through reactive measures of hazard control rather than proactive measures. It is now widely accepted across the globe that risk assessment and safety management greatly contribute towards improvement of safety of mining and other industries. Moreover, the role of ergonomics at workplaces is a significant factor in determining the level of safety in any given situation. Therefore, the ergonomics aspect should also be given due consideration in accident prevention.

During the recent time, safety aspects have been focused in emerging areas such as safety engineering, risk assessment and safety management plan, occupational health, automation and digitization, and ergonomics. This course is specifically tailored to address these thrust areas of safety as well emerging methods which can be used as valuable techniques by the safety management to deal with risk assessment and management of mining industries and to address the specific safety problems including the issues of near-miss / near-hit incidences. The course is primarily designed for all personnel involved in safety.

SCOPE OF THE COURSE

The following topics will be covered in the programme:

- Concept of safety engineering and its role in mining
- Recent trends in techniques of risk assessment across the globe
- Risk assessment and safety management plan of DGMS
- Analysis of human factors related accidents and behavioural based safety
- Safety systems analysis using fault tree approach for identification of potential safety problems
- Safety data analytics
- Emerging technologies in mine safety including ergonomics, wireless tracking of mine workers, virtual reality, and injury epidemiology
- Whole-body vibration of workers who are operating heavy machineries in surface mines
- Automation and digitization in mines (Industry 4.0)
- Case studies.

COURSE STRUCTURE

The lecture classes will be taken mainly by the faculty members of Mining Engineering Departments of the Institute. Some of the lecture sessions will be taken by experts from outside organizations. All lectures will be conducted through virtual mode (Online).

PROFORMA FOR APPLICATION / REGISTRATION

Name

Designation

Address

Academic Institution / Sponsoring industry

REGISTRATION FEE:
Rs. 18,000/ + 18% GST (per person) in favor of "CEP-STC, IIT Kharagpur"

Demand Draft Number/Electronic Transfer Reference No:

Date:
Complete contact address (including Fax No. and E-mail address if any)