Executive Development
Under
Continuing Education Program of IIT Kharagpur
on
SURFACE MINING: SAFETY AND PRODUCTIVITY
(During March 05-09, 2019 at Department of Mining Engineering, IIT Kharagpur)

Success of future surface mines will depend on careful handling of large size machinery, GPS technology remote diagnostics, automation and robotics along with reliable down time minimizing techniques etc. Wide range application of data acquisition system, digital ore body modeling integrated with mining machinery controls, computerized mine planning, reliable on line machine diagnostics and advanced communication systems will make the industry more competitive. Implementation of automation, cleaner mining systems and advances of machinery management etc. will be needed for the promising growth.

The nominees for this course will be asked to record their objectives. Following the course, delegates should consider whether they have met their objectives and to consider any further development opportunities arising. This is proven to aid the learning process and reflects our policy – to plan, undertake and reflect upon professional development activity. Through the deliveries in the course we try to expose standards, theory and methodologies, specific knowledge areas, interpersonal skills and latest tools and techniques with special attention to their applicability in specific mining environment.

The purpose of this five-day course is to enable the participants to enhance their understanding of surface mining operations in the light of the recent trends of developments to apply in their work place. This includes an assessment of the techniques of the safety and productivity enhancement in mines with special attention to the post mining liabilities. Spoil dump management and Catchment Area Treatment issues are highlighted in this course

We at the Department of Mining Engineering of Indian Institute of Technology, Kharagpur believe in continuous and lifelong learning and we design courses for the engineers in the mining Industry to train them in specific areas. The present course is one of such courses for the practicing engineers in Indian opencast mines. The participants will be encouraged to continue their exposure to the learning environment at the Department of Mining Engineering at IIT Kharagpur for their professional development using various online resources and contacts.

The course materials and quizzes will be available online in the MOODLE platform at www.miningpedagogy.iitkgp.ac.in/moodle

How will this course benefit you? Upon completion participants will be able to:

- Identify and evaluate the recent developments in surface mining technologies that could be useful for their work sites and how to introduce them through outsourcing
- Define the requirements of safety and productivity enhancement in mines and plan a programmes to achieve that
- Explain how to undertake safety and productivity audit in their mines.
- Prepare an executable project proposal for spoil dump management and Catchment Area Treatment

Course Content: The course will include the following broad areas:

- Purpose and role of ***outsourcing management*** in different surface mining activities
- Professional issues of safety and productivity in mines and their audits
- Procedures for safety and productivity auditing audit planning
- Basics of spoil dump management: stabilization and reclamation
- Catchment Area Treatment: what it is and how to do it
- Introduction of vetiver system: preparing proposal for system implementation

Course fee

The course fee of this non-residential course is ***Rs. 30,000.00*** *per participant payable by demand draft in favor of* ***"CEP-STC, IIT, Kharagpur" payable at Kharagpur or 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)****. The* ***course fee does not include boarding and lodging charges****. IIT Kharagpur is exempted from Income Tax and while sending the course fee no Tax should be deducted.* **GST @18% will be charged extra as per GoI rules.**

Companies sending more than 4 participants will avail the following reduced fee:

1. *For 5 participants: Rs 1, 45,000.00 (Excluding boarding & lodging).*
2. *More than five participants: Rs. 28,000/- for every additional participant (Excluding boarding & lodging).*
3. *The above course fee does not include GST that will have to be paid additionally by the sponsors as per GOI rule.*

Who should attend?

- ✓ This course will be suitable for those who have already had exposure to surface mining and are exposed to organizational practices through work experience in surface mining operations.
- ✓ The managers, executives and supervisory staff engaged operations and planning of surface mining.
- ✓ Surveyors working in surface mines will also be benefitted.
- ✓ The course will be very helpful in discharging their duties particularly for the Safety Officers, Environmental Managers and Excavation Engineers

Accommodation for the Course Participants

The course will be ***Non-Residential***. Accommodation in the campus is considered convenient and can be booked at the **Technology Guest House on payment basis of IIT Kharagpur** on prior request.

Address for Communication

For any other information or sending nomination please write to:

Prof. Khanindra Pathak
Course Coordinator
Department of Mining Engineering
IIT Kharagpur-721302
Phone: 03222283722 Mobile: 09800877877 Fax: 03222282700/282282
E-mail: **khanindra@mining.iitkgp.ernet.in / Khanindra.p@gmail.com**

Mr. Sourav Kr. Mandal
Course Manager
Department of Mining Engineering
IIT Kharagpur
Mobile: 8436718289/9732952854
E-Mail:souravm.iitkgp@gmail.com

Department of Mining Engineering, lIT Kharagpur

Set up in the year of 1956, this Department has steadily grown as one of the best mining education centre in the country. Besides offering undergraduate, postgraduate, and doctoral courses in Mining Engineering, it is actively involved in short term courses and research activities in the areas of Mining Machinery, Mine Safety and Reliability, Mine Fire and Explosions, Model Studies in Ventilation, Rock Mechanics and Ground Controls, Numerical Analysis of Mine Structures, Underground and Surface Environment, Geometrics and Remote Sensing, Mine Closure Planning and relevant computer applications. Short-term courses, consultancy, sponsored research programmes and postgraduate project works are part of the department's regular activities.