

Short Term Course

on

**SUSTAINABLE DEVELOPMENT OF MINING, MINERAL AND
ENERGY RESOURCES INDUSTRY**

AUGUST 03 - 07, 2020

by

Department of Mining Engineering, IIT Kharagpur



Coordinators

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&

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**INDIAN INSTITUTE OF TECHNOLOGY
Kharagpur – 721302**

INTRODUCTION

India is aiming to become a 5 trillion economy by 2024-25. Mining and energy resources industry including power and oil and gas industry are pillars of economic growth for any economy and more so for the aspiring 5 T economy of India. In order to achieve the 5 T goal, the mining sector has to grow by 3%. Similarly there will be a huge expansion in the oil and gas and other energy sector. Keeping pace with the growth in the mineral and energy sector, however, there will be huge environmental footprint that has to be managed scientifically. Sustainable development of the mining, mineral and energy resources industry requires a holistic approach from exploration of resources to their exploitation as well as ecofriendly management of the waste material. Framework for sustainable development of mineral sectors are to be designed keeping economy, health and safety, ecology and global laws in perspective. The short term course on “SUSTAINABLE DEVELOPMENT OF MINING, MINERAL AND ENERGY RESOURCES INDUSTRY” will discuss all these issues by lively lectures and presentations by professors, subject experts, and policy makers.

COURSE CONTENT

The course will include:

- Sustainability issues of coal mining, metalliferous mining, atomic and rare earth minerals.
- Sustainability issues of oil and gas industries
- Supply chain issues for raw materials for energy industries
- Environmental, social and economic sustainability framework
- Technology and decision support tools for sustainable development vis a vis industry 4.0
- Health and Safety management in mining and energy resources industries
- Remote-sensing application in mineral and energy resources industries

COURSE STRUCTURE

The course will consist of lectures and laboratory visits. The lectures will be delivered by faculty members of Indian Institute of Technology Kharagpur. Some lectures will also be delivered by experts from industry and governmental agencies. Each session will be followed by interactive Q &A session.

PARTICIPATION

The course will be useful for the middle level executives looking after production, raw material supply, environment, health and safety management in mining, mineral, oil and gas industry, power plants and other allied industries. Executives from atomic and rare earth mineral industries, and environment, health and safety consultants, R&D organisations will also be benefitted from this course. Students from Mining Engg, Petroleum Engg, Geology and other streams are encouraged to attend this course.

HOW TO SEND NOMINATION

Please send the names of your nominees with their designations and addresses to the Course Coordinator preferably before 28.06.2020

ACCOMMODATION

Accommodation for the participants is normally booked at the *Technology Guest House* of IIT, Kharagpur *on prior request on payment basis*. Alternatively, there are local hotels available in the town. However, the accommodation in the campus is considered convenient.

SPONSORSHIP

Sponsorship opportunities for industries are available under three categories.

Platinum Sponsor: Sponsorship fees is Rs.5.00 Lakhs (6 free participants)

Gold Sponsor: Sponsorship fees is Rs.3.00 Lakhs (4 free participants)

Silver Sponsor: Sponsorship fees is Rs.1.50 Lakhs (2 free participants)

COURSE FEE

The course fee of this course is Rs. 30,000.00 (Rupees Thirty thousand only) per sponsored participant from industries. Additional 18% GST will be levied as per GOI rules. The course fee for students and research scholars is free. The course fee is 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.

ADDRESS FOR COMMUNICATION

For any other information or sending nomination, please write to:

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INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

With a modest start in the Hijli Detention Camp, a symbol of the national struggle for freedom, Indian Institute of Technology Kharagpur has grown during the last 60 years to become a Centre of Excellence in teaching and research in diverse fields of engineering and technology, and has dedicated itself to fulfill the science and technology ambitions of the resurgent India. Indian Institute of Technology Kharagpur (IITKGP) is set in a sylvan surrounding about 120 km from the City of Kolkata.

DEPARTMENT OF MINING ENGINEERING

Set up in the year of 1956, the Department of Mining Engineering has grown over the years as one of the pioneer mining education centers in the country. It has played a pivotal role in introducing the modern mining engineering curriculum in India. The department offers undergraduate, postgraduate, and doctoral courses in mining engineering. This department has produced more number of doctoral degrees in mining engineering than any other institute in India. The department is actively involved in research activities in the areas of rock mechanics and ground control, mining machinery, underground and surface environment, coalbed methane, mine safety and reliability, mine fire and explosions, model studies in ventilation, numerical analysis of mine structures, geomatics and remote sensing, mine closure planning and relevant computer applications.