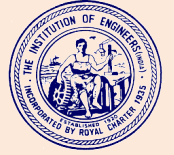




Engineering Staff College of India



Mining Division



3-Day Residential Continuing Professional Development Programme

“Insights into Mechanization & Technology in Underground and Opencast Mining for Optimum Extraction”

7 – 9 May 2025



Centre for Promotion of Professional Excellence

Introduction

Mechanization & Technology Development in Underground & Opencast Mines plays an important role to improve safety, productivity profitability and sustainability. This program would focus on mechanization and automation of mining activities with the state of the art technologies in underground & opencast mines to design a safe and efficient mining method like board & pillar, longwall, continuous miner, bolter-miner in underground and shovel-dumper, bucket-wheel excavators, surface-miners, highwall mining, draglines in opencast with due consideration to geology of mineral deposits, thickness, strata condition, slope stability, mine fires, ventilation, miner's health, mechanical & electrical design & safety, subsidence, environmental aspects, inundation & human factor which influence choice of technology and methods of mining to enhance safety, quality, productivity and sustainability

Objectives

This program would be a platform to share the knowledge on advancement in methods & technologies with integrated holistic approach for application in mining, resolution of issues pertaining to the introduction of modern technology, to significantly contribute in reduction of accident rate, mitigate barriers to success, selection of appropriate design, training requirements & maximizing benefits to all the stakeholders.

Course Coverage

Trends in technology, best practices in UG & OC mining, intricacies of extraction of thick seam, deep-seated deposits, rock properties, caving behavior & assessment of overburden, support requirements, strata control and management plan, remote mining, smart sensors and the use of robotics, proximity detection system, trackless equipment, conveyors, concepts of digital mine using IoT, AI, ML to increase efficiency, effectiveness and to mitigate environmental and safety concerns through technical presentation by expert speakers.

Benefits to the participant

Insights into best practices, high-end technology in UG & OC.

Methodology

- Lectures/presentations in classroom
- Interactive sessions.

Resource Persons

The faculty consists of experts from the industry, research establishments and academia besides in-house faculty of ESCI.

Target Participants

This programme would be useful to mining engineers, mine managers, mine surveyors electrical & mechanical engineers.

Programme Dates & Timings

7 – 9 May 2025

10.00 a.m. - 5.00 p.m. each day

Course Fee

- **Residential: INR 24,000/-** (Rupees twenty four thousand only) per participant which includes course material, course kit, twin-sharing AC accommodation, breakfast, lunch, dinner, tea and snacks during the actual days of training programme.
- **Non-Residential: INR 21,000/-** (Rupees twenty one thousand only) per participant which includes course material, course kit, lunch, tea and snacks during actual days of training programme.

GST @18% is to be paid extra over and above the course fee. **PAN: AAATT3439Q**, **GST No: 36AAATT3439Q1ZV**, **HS No.: 999293** (under commercial training or coaching services – clause 65(105) (ZC) of Finance act – 1994).

Course fee is to be paid in favour of “**THE I.E.(I) – ENGINEERING STAFF COLLEGE OF INDIA**” in the form of demand draft payable at Hyderabad. Alternatively the payment may be made by **Electronic Fund Transfer (EFT)** to ESCI –**SB A/c No. 33705165550** with **State Bank of India, Manikonda Branch, Door No.2-30/1, Indira Nagar, Gachibowli, Hyderabad – 500032**, our **NEFT/RTGS/IFSC Code No. SBIN0011076 – MICR No. 500002107**. *While using EFT method of payment, please ensure to communicate your company name, contact details, our invoice reference and programme title.*

Registration

To register, please send your nominations by providing name, designation, contact address, email address, mobile no. / telephone number of the participant along with the details of mode of payment of fee, addressed to: mining@escihyd.org.

Certification

A **Certificate of Participation** signed by the Director, ESCI would be awarded to each participant on conclusion of the programme.

Profile of Expert Speakers



Dr. V Balaram received M.Sc.(1974) and Ph.D. degrees (1979) in Chemistry from the Andhra University, Visakhapatnam. He is Former Emeritus Scientist and Chief Scientist & Head, Geochemistry Division, CSIR - National Geophysical Research Institute (NGRI), Hyderabad- 500 007, India. His research areas include trace element geochemistry, marine geochemistry, mineral exploration, spectroscopy, and environmental chemistry.



Dr. G Karthik did B.Tech and M.Tech from Jawaharlal Nehru Technological University, Hyderabad & Ph.D. from NIT Rourkela. He is working as an Associate Professor, R&D Coordinator, and DQAC Member in the Electronics and Communication Department at Stanley College of Engineering and Technology for Women, Hyderabad. He is a member in various professional bodies such as UACEE, IAENG, IDES, IFERP, IETA and ASR and as an editorial board member in various international Journals



Mr. P Ranganatheswar graduated in Mining Engineering from Osmania University and worked in , The Singareni Collieries Company Ltd. & well experienced in the coal winning operations from manual, semi mechanized to fully mechanized working faces including highly productive long-wall faces. Joined Directorate General of Mines Safety/DGMS worked as Dy. Director. He visited Germany, France, U.K., Australia, USA, South Africa and China on different collaborative projects to oversee and understand the best mining practices adopted in their countries. He also worked as Advisor (Mining) at Gayatri Projects Limited and as task based Advisor (Mining) for M/s Central Coal Fields Limited.



Dr. P Balamadeswaran graduated in Mining Engineering (B.E) from the College of Engineering Guindy, Anna University, Chennai in 1991. He holds M. Tech in Opencast Mining and Ph.D. in Mining Engineering with special reference to 'Investigation of Blast Design Parameters on Rock Fragmentation and Ground Vibrations in Opencast Mines' obtained from the Indian Institute of Technology (ISM), Dhanbad. He is also a holder of First-Class Manager's Certificate of Competency (Metal-Restricted) and a Recognized Qualified Person (RQP). He worked in Hindustan Copper Limited, Malanjkhand, Madhya Pradesh for seven years and as Area Sales Manager in Tamil Nadu Industrial Explosives Limited. After a short stint in a MNC located in Indonesia, he joined M/s. Dempo & Co (P) Limited, Goa. His areas of specializations are Rock Blasting Engineering, Slope stability in Surface Mines, Surface Mine Planning & Design. Presently he is working as Assistant Professor, Mining Department, Anna University, Chennai



Mr Lolla Sudhakar,. Master of Technology (**M.Tech**) – Mining from Indian School of Mines, Dhanbad, 1994; Bachelor of Engineering (**BE**)-Mining from Kakatiya University, Andhra Pradesh, 2000; *PG Diploma in Environmental Studies (PGDES) from Andhra University, Vishakhapatnam, 1995* First Class Manager's Certificate of Competency: A total of 30 years of experience in coal mining field. Experience in Project Planning, Preparation of Feasibility Reports & Government Approvals for Green Field Projects .Project Implementation and monitoring, equipment selection and DGMS approvals. *He visited Poland, Siberia and Russia, Tajikistan, China, United Kingdom.* Presently, he is working as Vice-President, Adani Coal Resources



Mr A.V. Raghuram graduated in B'Tech (EEE) from S.V. University College of Engineering, Tirupathi and M.Tech (Mining Machinery) from Kothagudem School of Mines, Osmania University, and P.G. Diploma in Materials Management from Annamalai University. He worked in SCCL in Longwall Projectst for Project implementation, Installation, commissioning, operation and Maintenance of Longwall machinery and Electrical Systems, as Advisor (Engg. – Electrical) in SMSL @ Tummalapalli Project - Excavation of Uranium ore for UCIL &.Consultant for Electrical Equipment (System Design & Selection) and Pneumatic tools for Mining Industry.



Mr H. Veeraswamy graduated in Mining Engineering and obtained M. Tech in Mine Planning from Osmania University and Post Graduate Diploma in Computer Science from Central University, Hyderabad . He is holding professional life membership of FEI, MEAI, MMGI and QCFI. He obtained "First Class Manager's Certificate of Competency"

He worked as General Manager in The Singareni Collieries Company Limited He is a high calibre, accomplished, resourceful mining engineer with 37 year of rich and varied experience in all aspects of underground and opencast coal mining where state-of-the-art technologies and methods are employed. He underwent training in Continuous Miner Technology in Republic of South Africa. He also worked as a Regional -Head for SCCL Coal Projects in JMS Mining Private Limited, Kolkata, India.



Dr N Sri Chandrabhas did B.Tech from GIET and M.Tech from IIT(ISM) and obtained II Class Manager's Certificate of Competency (Unrestricted) and PhD from ISM/ IIT Dhanbad. He has 4 years of teaching experience and 3 research publications to his credit and his research interests are Drilling and Blasting, Mine Environmental Engineering including software applications. He conducted blasting studies deploying drones. Presently he is working as Asst. Manager, GTS, Hyderabad.



Mr Prathap Kumar Paidipelli

Received M.Tech degree (1978) from JNTU Hyderabad and Post Graduate Diploma in Materials Management from Annamalai University. He worked in The Singareni Collieries Company Ltd. and gained rich experience in various capacities in underground, opencast mines, workshops, materials management, construction of Power project etc. He also worked in Coastal Projects Pvt. Ltd. And well versed with tunneling operations with TBM. Presently he is employed in Vensar Pvt Limited, Hyderabad



Mr P Kumar did his B.Tech (Mech) from NIT, Calicut, Kerala, M.Tech (IC Engines and Gas Turbines) from NIT, Warangal, Telangana, M.B.A (Marketing) from IGNOU. He is a Fellow of The Institution of Engineers (India) and Sr. Member in Indian Institute of Industrial Engineering.

- Worked in The Singareni Collieries Company Limited in Opencast Projects in fields of erection, commissioning, maintenance of various models and capacities of HEMM ,TPM, HRD, Tyre Management, POL of UG & OC Projects and superannuated as Additional General Manager
- Worked as Executive Director in Radials International of Michelin OTR Tyres.



Dr M S Venkataramayya is a postgraduate in Mining Engineering from Osmania University and obtained his Doctorate from NITK, Surathkal, Karnataka.He served in The Singareni Collieries Company Limited for 37 years in various positions and superannuated in 2017 as General Manager.Later he worked as Professor in Mining Department in Malla Reddy Engineering College, Hyderabad, Guest faculty in College of Engineering, Osmania University and also a member of Board of Studies in various Engineering Colleges in Telangana and Andhra Pradesh. He is presently working as Director in Vensar Pvt Ltd,Hyderabad



Er K J Amarnath a Gold Medalist, in BE (Mining Engineering) from College of Engineering, Osmania University, Hyderabad He retired as Chief General Manager from The Singareni Collieries Company Ltd.

(A Government Company) after rendering a meritorious service of about 38 years in various capacities in Underground and Opencast Technology in Planning & Operations, Human Resource Development, Business Development, Education, Safety, Corporate Planning and Projects. Further, he was Director in NSGPVL, A Joint Venture Company of NTPC Ltd, A Central Government PSU and The Singareni Collieries Company Ltd, A Government Company.

He visited the United Kingdom, Spain, United States of America & Australia during his service which enhanced his capabilities in terms of Technical, Managerial & Business Skills. He is also a holder of First Class Manager's Certificate of Competency issued by The Director General of Mines Safety, Ministry of Labour,

Presently he is working as Senior Faculty-Head, Mining Division, Engineering Staff College of India, Hyderabad.

Contact Persons

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