



## SKILL DEVELOPMENT PROGRAMME

# MANAGING SAFETY & ENVIRONMENTAL IMPACTS OF BLASTING

**Date: 03-05, December 2018**

**Venue: Jodhpur**

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JNV University, Jodhpur

### Course Objectives

This course is designed for senior and middle level executives. Course aims to keep the practicing engineers, managers and policy makers updated in this rapidly advancing technology. The course is designed to combine a sound theoretical basis with practical problems solving, hands-on use of blast monitoring equipment and computers. Controlling the environmental impacts of Blasting operations such as ground vibrations, air vibrations (noise), dust, flyrock is necessary to improve overall results. This programme would help participants to keep current with the latest information and techniques, and to use the information to improve their blasting operations and thereby improve overall mining and construction operations.

#### **Blast Design for Desired Fragmentation**

Rock fragmentation process and role of discontinuities and in-situ stresses, explosives energy delivery and partitioning, fragmentation prediction and measurement, Dust and Fines generation and control, throw, dig ability, effects of geology.

#### **Surface Blasting Operations**

Blast design and patterns, Practical blast design, QA/QC, wall control, large scale blasting, dilution control and costing, air decking, Predicted and actual blast results,

#### **Explosives & Initiating Systems**

Selection of explosives, design to avoid malfunction, delay sequence and influence on fragmentation and diggability, electronic detonations on fragmentation, effect of timing, electronic detonators

#### **Environmental Impacts of Blasting**

Ground and Airblast -The nature of Blast Vibration, Measurement of Blast Vibration Operation of Measurement Equipment Verification of Measurements Vibration Limits

#### **Dust and Fines**

Generation and Dispersion, control

#### **Flyrock**

Causes and Prevention

#### **Rock Damage & Controlled Blasting**

#### **Safety and Accident Prevention**

**Computer software:** Blast Information Management System, Blast Designer,

Fragmentation predictor, Air Blast predictor, Ground predictor, Blast Clearance estimator and Smart Blasting App. Hands on practice

### **Registration**

**Fee: Rs. 15,000.00 (18% IGST Extra) per participant**

- Registration fee includes course material, demonstration and hands on experience on use of software and instruments.
- Payment is to be made through Bank draft or Bank transfer to: **CONTINUOUS EXCELLENCE PRIVATE LIMITED, HDFC BANK LTD ( BASANI INDUSTRIAL AREA JODHPUR 342005) Account No :50200010847331 , RTGS/NEFT IFSC :HDFC0001420 MICR :342240004** • The course is Non-Residential. • Discount on registration fee of Rs. 500/- per participant for organization sponsoring more than 3 candidates. • Early bird discount will be provided if payment sent 1 month before the organization date of the course