Application Format

(Please type or print in BLOCK letters)

1. Name_____

2. Designation: _____

3. Mailing Address: _____

_____

Phone _____ Fax:_____

E-mail ID:_____

4. Academic Qualification: _____

5. Professional Experience (in years):
Industrial :_____
Teaching: _____
Research:_____

8. Accommodation Required: Yes / No

Signature _____

Registration includes Registration kit, course notes, breakfast, lunch, and tea. Participants also receive a Certificate of Completion.

WHO SHOULD ATTEND

Mining engineers, geologists, resource analysts, mine planners involved in feasibility studies, resource modeling, pit limit calculation, production scheduling, interested in new technologies for orebody modeling and optimal decision-making.

INSTRUCTOR

Snehamoy Chatterjee is currently an Assistant Professor at Department of Mining Engineering, National Institute of Technology, Rourkela. Previously he was research associate of COSMO Mine Planning Laboratory, McGill University, Canada. He holds a PhD in Mining Geostatistics from IIT Kharagpur. He has been working on Ore reserve estmation, open pit mine planning, and production scheduling using advance geostatistics and cutting edge operation research techniques. Snehamoy has been a Post Doctoral Fellow with University of Alaska Fairbanks, USA.

Some lecture classes will also be taken by the faculty members of Mining Engineering Department of NIT Rourkela and IIT Kharagpur.

VENUE

Department of Mining Engineering
National Institute of Technology
Rourkela 769008, Odisha

LOGISTICS

Lectures are given from 9 AM to 5 PM with two 15 minute coffee breaks and a 1 and half hour lunch break. The accommodation of the participants will be arranged at the Institute guest house on payment basis.
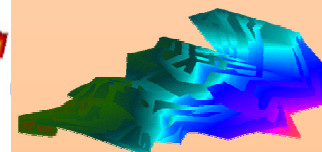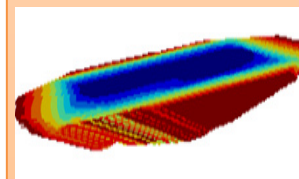
SHORT TERM COURSE

Ore Reserve Estimation and Mine Planning

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Dr. Snehamoy Chatterjee

December 14-16, 2012

Organized by
Department of Mining Engineering
National Institute of Technology
Rourkela 769008, Odisha

CONTENT AND OBJECTIVES

An integrated approach of ore reserve estimation and mine planning is essential for proper managing of resources and maximising the profit. This three-day course presents different ore reserve estimation techniques starting from the traditional methods to the new generation geostatistical techniques. The emphasis will be given on integrating geostatistical methods for mine planning optimisation, which leads to improved cash flow analysis.

The special attention will be given on the downstream applications applicable to the feasibility, planning stages of mining, and the financial optimisation of relevant aspects of operations and production. The demonstration and hands-on experience of different mine planning software like Surpac and Whittle is an integrated part of this course. The computer workshops give an exposure to participants to the practical aspects of the technologies taught in lectures. The public domain ore reserve estimation software along with real case study examples help participants to get an idea how this methods can be applied in reality to maximise the profit.

COURSE OUTLINE

Concept of sampling and data compositing
Traditional ore reserve estimation methods (polygonal, nearest neighbourhood, inverse distance, triangulation etc.)
Reserve estimation using geostatistical methods (ordinary kriging, simple kriging, indicator kriging etc.)
Spatial continuity modeling (variogram, correlogram, indicator variogram etc.)
Mining cost and metal price analysis
Ultimate pit limit (UPL) calculation
Pushbacks design
Mine production scheduling
Ore reserve estimation case study on iron and limestone mines
Case studies on copper and iron mine for UPL calculation, pushbacks design, and production scheduling
Demonstration and hands-on experience of Surpac and Whittle Software
Half day workshop on free resource modeling software SGeMS

ABOUT NIT ROURKELA

National Institute of Technology (NIT), Rourkela was founded as Regional Engineering College, Rourkela in 1961. It is a prestigious Institute with a reputation for excellence at both undergraduate and postgraduate levels, a close interaction with industry and a strong emphasis on research, both basic and applied.
The city of Rourkela is a bustling industrial town, cosmopolitan by nature and is well connected to all parts of the country by road and rail. It is en-route Howrah-Mumbai main line of South-Eastern Railway. NIT campus is approximately 7km from Rourkela railway station.

ABOUT THE DEPARTMENT

The Department has well qualified staff dedicated to applied research in the field of Mine Planning, Mine Geology, Mine Environment, Safety Engineering, Coal Mining Technology, Surface Mining Technology, Mine Management, Ventilation, Machinery and Geo-mechanics. Laboratories are equipped with modern and sophisticated instruments in the areas of Mine environmental, Geology/ Geophysics, Rock Mechanics, Machinery, Surveying, coupled with adequate computing facilities with the state-of-the-art software e.g. SURPAC, Whittle, Blocksim, Petrasim, Ansys, Fluent, Matlab, Flac-2D, 3D, UDEC, Labview etc. An all round development of student is aimed at with emphasis on the applied aspects of Mining Engineering through practical training, project seminars, and field work.

FEES

The course fee is Rs.8, 000/- per participant. The course fee is to be paid in the form of Demand Draft in favour of "Continuing Education, NIT, Rourkela" payable at SBI, NIT Branch, Rourkela-8 (Code-2109). The filled application form and demand draft should be sent to:

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