

INTRODUCTION

In every coal mining company, STRATA CONTROL CELL shall be established at corporate and area levels within one year as per recommendations of the 10th National Conference of Safety in Mines held at New Delhi 26-27th Nov, 2007. However, till now strata control cell not establish in all the coal mining areas as required. This may be attributed partially due to lack of proper responsiveness among the officials of some coal mining Industries. Strata control cell in coal mines can assist mine managers, for formulation of Systematic Support Rules, monitoring strata control measures in a scientific way to ensure efficacy of support system and, for procurement/supply of quality supporting materials. This issue can be addressed by proper monitoring of strata and taking adequate control measures in time. Geotechnical instrumentation although has been extensively used in the coal mines, still there is no standard procedures for undertaking the investigation as well as type of instrumentation for monitoring of the strata behaviour. Keeping this in views a short term course was held at NIT-Rourkela on "Trends in strata control techniques and instrumentation for enhancing safety in coal mines" during July 28th--31st, 2008. The Mining Engineering department of NIT-Rourkela also conducted Workshop/ Training programs in coalfield areas of M/s SCCL, SECL, WCL, MCL etc under the TEQIP sponsored by the World Bank through National Project Implementation Unit during Oct-Dec'08. Strata control technologies have undergone considerable change and it is pertinent that the field engineers must be trained in the state of the art instrumentation for effective implementation of the strata control measures in coal mines.

SCOPE OF THE COURSE

The course has been structured to include the recent trends in geotechnical instrumentation and strata control technologies for application in coal mines. It is also aimed at updating and upgrading the conceptual and applied knowledge of the participants in the thrust area. In this course, special emphasis will be made on numerical modeling, advanced instruments, strata control techniques besides case studies on typical strata control problems.

It is expected that the participants from academic institutions, R&D organizations, safety organizations as well as professional engineers will be highly benefited by the course.

COURSE CONTENTS

- Geological factors contributing to strata control problems in mines
- Design of support system for development and depillaring workings
- Design of support system for long wall workings
- Application of modeling techniques to strata control problems
- Application of various techniques for slope monitoring in Open cast mines.
- Instrumentation for evaluation of strata condition in coal mines.
- Strata control techniques and its application to coal mining industry-case studies
- Case studies on geotechnical instrumentation and strata control in coal mines
- Organization of strata control cell in mines.
- Demonstration of geotechnical instrumentation and computer software's

FACULTY

The course will be offered by the faculty members of NIT Rourkela. Experts from other academic institutions, Central Institute for Mining and Fuel Research, Directorate General of Mines Safety, Dhanbad, National Institute of rock mechanics, Kolar Gold Fields will be invited to share their latest research findings with the participants.

REGISTRATION AND FEE PARTICULARS

Applications in prescribed format and the course fee in the form of a cheque/demand draft drawn in favour of "Continuing Education, NIT Rourkela" payable at any bank in Rourkela must reach the coordinator on or before **20th oct, 2009**. The selected participants will be informed by **10th, oct, 2009**.

COURSE FEE: Rs. 6000

BOARDING, LODGING AND TRAVELING

Participants are required to make their own arrangements for lodging, boarding and traveling. Accommodation at Guest houses of NIT, Rourkela may be arranged with prior request subject to availability.

SHORT TERM COURSE on

STRATA CONTROL TECHNIQUES AND INSTRUMENTATION FOR COAL MINES

Nov 19 - 22, 2009

APPLICATION FORMAT

1. Name:
2. Designation:
3. Mailing Address:
Telephone No.:
Fax:
E-mail:
4. Organization where employed:
5. Academic Qualification:
Experience (in years):
Teaching:
Industrial:
6. Registration Fee particulars:
Amount: Rs.
Cheque/DD No. and Date:
7. Accommodation Required: Yes/No.

Date

Signature of the Applicant

SPONSORSHIP CERTIFICATE

Dr./Mr./Ms.....
is an employee of our institute/organization and his/her application is hereby sponsored. The applicant will be permitted to attend the short-term course at NIT, Rourkela during 19-22 Nov, 2009 if selected.

**Signature with Date & Seal
of Sponsoring Authority**

The duly sponsored application should be mailed to:

Dr. S. Jayanthu, Professor & Head
Dr. M.K.Mishra, Asst. Professor
Department of Mining Engineering,
NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA-769008
ORISSA
Tel: 0661-2462600-01-08-11 (O), 9938303259(M)
Fax No. 0661-2472926, 2462999
E-mail: sjayanthu@nitrkl.ac.in
hon-mn@nitrkl.ac.in

Website: www.nitrkl.ac.in/shorttermcourse/mn

ABOUT NIT, ROURKELA, ORISSA

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, fostering the spirit of national integration among the students, 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. Nesting amidst greenery on all sides, NIT campus is approximately 7km from Rourkela railway station. Rourkela is also connected by Air via Ranchi and Kolkata.

DEPARTMENT OF MINING ENGINEERING

The Department has well qualified staff dedicated to applied research in the field of coal mining technology, mine environment, safety engineering and geomechanics. Laboratories are equipped with modern and sophisticated instruments in the areas of Rock Mechanics, Mine Surveying, Mine Environment, Mining Machinery, Mine Safety Engineering and Mining Geology / Geophysics coupled with adequate computing facilities with the state-of-the-art softwares e.g. SURPAC, 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, camps and field work.

COURSE COORDINATORS:

Dr. S. Jayanthu, Professor & Head
Dr. M.K.Mishra, Asst. Professor

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COORDINATORS

Dr. S. Jayanthu
Dr.M.K.Mishra



Department of Mining Engineering

**National Institute of Technology
Rourkela**