

WORKSHOP PROGRAMME

Date & venue : February 24-25, 2013 at CBIP Conference Hall, Malcha Marg, Chanakayapuri at New Delhi.

Topic : Design, Construction and Risk management in underground Constructoin

Faculty : Resource Speakers who have vast experience in the field.

REGISTRATION FEE

Countries	Delegate/Authors	Research Students
India	Rs. 10,000*	Rs. 5,000*
Others	US\$ 400*	US\$ 350*

* Service tax extra @ 12.36%

10% discount will be applicable to Members of TAI/CBIP

SPONSORSHIP

The conference will provide an excellent opportunity to national and international organizations; central / state government organizations, public sector undertakings, industrial organizations, equipment manufacturers, entrepreneurs, financial and funding institutions, consulting organizations and construction organizations to publicize themselves by being Platinum / Golden / Silver sponsors or Supporter of the Conference. The sponsorship fees payable and benefits are mentioned below. Interested organizations may communicate their willingness to the Conference Secretariat.

Level	Fee	Benefit / Complimentary included Items
Platinum Sponsor	USD 15,000 INR 5,00,000	<ul style="list-style-type: none"> Full registration for ten delegates Company name and logo on conference, Web Page (linked to the company website) promotion material like proceedings volume, banner/ signage, stationary items etc. A full page advertisement in the Souvenir 10 min. time slot for technical presentation in the respective session Distribution of Literature/ Brochures One Exhibition Stall of 3 m x 3 m
Golden Sponsor	USD 10,500 INR 4,00,000	<ul style="list-style-type: none"> Full registration for five delegates Company name and logo on conference, Web Page (linked to the company website) promotion material like proceedings volume, banner/signage, stationary items etc. A full page advertisement in the Souvenir Distribution of Literature/ Brochures 50% Discount on booking of one Exhibition Stall of 3 m x 3 m
Silver Sponsor	USD 7,500 INR 3,00,000	<ul style="list-style-type: none"> Full registration for three delegates Company name and logo on conference, Web Page (linked to the company website) promotion material like proceedings volume, banner / signage, stationary items etc. A full page advertisement in the Souvenir Distribution of Literature/ Brochures
Supporter	USD 5,000 INR 2,00,000	<ul style="list-style-type: none"> Full registration for two delegates Company name & logo in conference proceedings volume A full page advertisement in the Souvenir Distribution of Literature/Brochures

Conference Secretariat
Secretary
Central Board of Irrigation & Power
Malcha Marg, Chanakayapuri, New Delhi - 110 021, India
Phone : 91-11-2611 5984 / 2611 1294 Ext. 113;
Fax : 91-11-2611 6347
Contact Person : Mr. A.C. Gupta (Mobile No 91-9871995996) /
Mr. Sunil Sharma (Mobile No 91-9811299136)
Email : cbip@cbip.org; sunil@cbip.org Website : http:// www.cbip.org

ADVERTISEMENT OPPORTUNITIES

A limited space will be made available on first-come-first-served basis, for coloured advertisement to the organizations, involved in the concerned field, in the proceedings volume of the Conference. The interested organizations are required to send the CD of the advertisement material, in A4 size i.e., Art Work / Negative/ Positive along with payments as detailed below:

Inner Pages	US\$ 500 / INR 30,000
2 nd & 3 rd Cover	US\$ 1000 / INR 50,000
Back Cover	US\$ 1500 / INR 75,000

HOTEL ACCOMMODATION

We recommend that you book the hotel rooms well in advance, by indicating your preference for hotel category in the registration form. The hotels and the range of tariffs are given below :

- 5 Star Hotels** : Taj Mahal, The Oberoi, Taj Place, The Lalit, The Park, Shangrila, Le Meridien, Jaypee Siddharth
- 4 Star Hotels** : Royal Plaza, Hans, The Connaught, Radisson Blu, Marina, Janpath
- 3 Star Hotels** : Sunstar Residency, Sunstar Grand, Metro Heights, The Corus, Grand Surtaj, Good Times

TECHNICAL VISITS

TV1 Delhi Metro - 1st March 2013

TOUR PROGRAMME

EXCURSION TOURS (same day return trips) 1st March, 2013

ET-1 The City of Romance - Agra

It is for that superb white marble tomb known as the Taj Mahal built by Emperor Shah Jahan for his beloved wife Mumtaz Mahal, that Agra occupies a mystic stature in the world's imagination. After his first sight in 1857 of the Taj inlaid with semi-precious stones, Lord Robert wrote, "To those who have not already seen it, I would say - go to India. The Taj alone is worth the Journey". There is therefore no surprise that the Taj occupies a prominent place amongst the eight wonders of the world.

ET-2 The Pink City - Jaipur

Welcome to a glorious riot of colour, pomp and pageantry; to a dream called Jaipur! Amer Fort - which inter alia be the Jai Mandir or the Temple of Victory with its famed Sheesh Mahal, the scintillating Hall of Mirrors reflect the past glory of Rajputs. The delegates ascend the fort on elephant backs just as the Royalty did in the past. Hawa Mahal - The Palace of Winds, it presents a unique and a fascinating facade with five storeys of windows with latticed screens.

For more details please refer Website : <http://www.cbip.org>

PAYMENT

All payments are to be made by the following methods:

A. Registrations/ Sponsorships/ Advertisements

- Banker's Cheque payable to:** Central Board of Irrigation and Power, New Delhi
- Bank Transfer :**
Name of Bank : HDFC Bank Ltd.
G-3/4, Suryakiran building, 19 K.G. Marg, New Delhi - 110 001

Beneficiary Details

Organization : Central Board of Irrigation and Power
Account No. : 00031110004411
MICR Code No. : 110240001
Swift Code : HDFCCINBBDEL
IFGC : HDFC0000003

No other methods of payment are acceptable. Bank charges if any, must be borne by the participants and should not be deducted from the amount remitted to the Conference Secretariat.

OFFICIAL TRAVEL AGENT

COX & KINGS LIMITED
Kamal Cinema Commercial Complex, Block A & B
Safdarjung Enclave New Delhi - 110029, INDIA
Tel.: +91-11-26767900, 26768811; Fax : 91-11-26177373
Contact Person : Mr. Vikas Khanna, Sr. General Manager-MICE
E-mail: vikaskhanna@coxandkings.com
Website: www.coxandkings.com

TUNNELLING ASIA' 2013

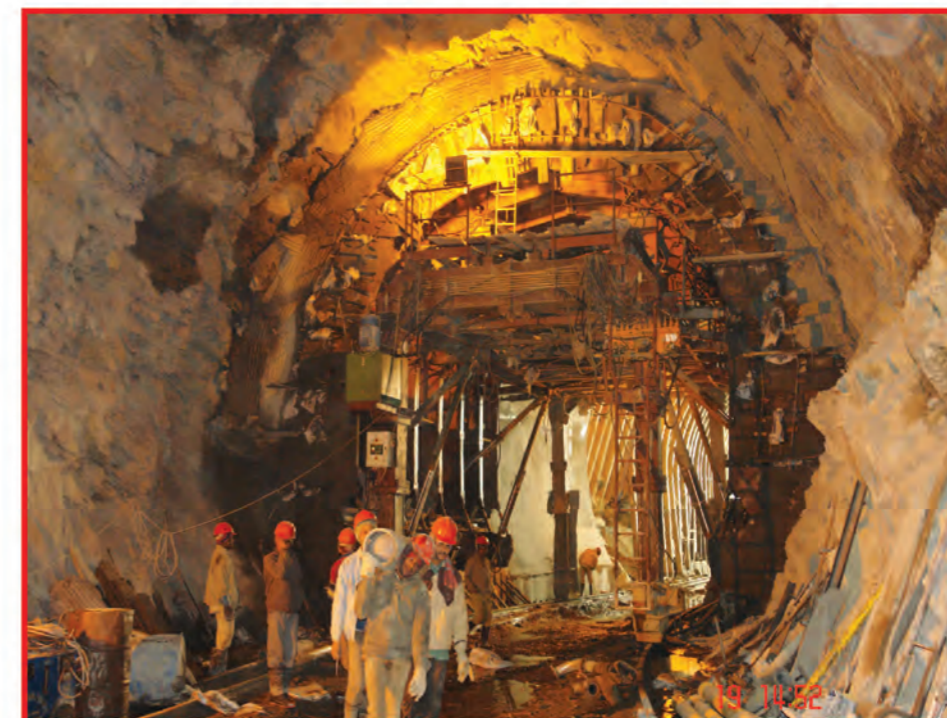
Using Underground Space in Urban Cities: Issues & Challenges

26-28 February, 2013, India Habitat Centre, New Delhi

& WORKSHOP

Design, Construction and Risk Management in Underground Construction

24-25 February, 2013, CBIP Conference Hall, New Delhi



Under the aegis of



TAI

International Tunnelling &
Underground Space Association

Organised by :



TAI

Tunnelling Association of India
&
Central Board of Irrigation & Power



ISO 9001:2008

Co-Organised by :



Delhi Metro

Sponsored by :



The Chemical Company

INVITATION



On behalf of the Organising Committee of the **Tunnelling Asia' 2013 – Using Underground Space in Urban Cities : Issues and Challenges**, I take great pleasure in extending a cordial invitation to individuals, Regulatory Bodies, Govt. Departments, Tunnel Building Contractors and Consultants, Manufacturers, Technical Research Institutes, Universities and Funding Agencies, who are all actively involved in the tunnel and underground construction, to participate in the exciting conference from 26-28 February 2013 at New Delhi. This conference is being organized by the Tunnelling

Association of India in association with the Central Board of Irrigation and Power under the aegis of International Tunnelling and underground Space Association (ITA).

I also extend a cordial invitation to all the National Committees of ITA and the agencies involved in tunnel and underground construction including planners, designers, geologist, construction firms, consultants, insurance agencies, equipment manufacturers to participate in the exhibition being organized from 26-28th February 2013 in conjunction with the Tunnelling Asia' 2013 conference at New Delhi. In view of many underground structures under construction are being planned in this country, there is vast scope for such agencies from outside the country, to participate in these construction works by demonstrating their capability either in providing services or equipment by taking part in the exhibition.

We look forward to welcoming you in New Delhi, and hope that your stay and experience here will be a memorable one.

(Mangu Singh)

Chairman Organising Committee &
President, Tunnelling Association of India &
Managing Director
Delhi Metro Rail Corporation

INTRODUCTION

Location of various facilities underground will be the order of the day in the immediate future to ensure sustainable life for future societies by providing necessary infrastructure to accommodate transportation, communication utility networks and complexes for handling, processing and storage of many kinds of materials, more so in urban areas which will have to accommodate large populations. Application of new technologies besides use of sophisticated equipment for underground construction works would be warranted for execution of works in a cost effective manner conforming to sustainable development. With rapid growth of underground structures anticipated, there will be evolution of new technologies and innovative construction practices.

In India, considerable tunnelling activities in the field of tunnelling are in progress for the execution of water resources projects for irrigation, hydropower generation, building of roads in mountainous areas, subsurface excavations for underground railway, underground storages for petroleum products and for mining purposes.

With a view to provide information at international level of knowledge and experience gained in the large scale underground structures and tunnel projects for the benefit of future projects throughout the world, delegates will be provided with a unique opportunity through this conference to facilitate exchange of views and ideas with professionals who have been actively involved in the success of the tunnel projects. A large number of experts are likely to participate to stimulate the debate on the challenges met and the lessons learnt, with the application of new practices and technologies. It is in this context this International Conference "Tunnelling Asia' 2013", is being organised which would be unique experience for the participant.

TOPICS

Planning, Investigation and Design of Tunnel, Cavern & Underground Projects

- Planning, Investigation and Interpretation of Geological Data;
- Engineering Classification and Characterization of Rock Mass;
- Hydraulic and Structural Design of Tunnels;
- Stabilization and Support System for Tunnelling;
- Determination of In-situ Stresses for Underground Excavation;
- Instrumentation Monitoring, Back-analysis and Modelling Methodologies;
- Analysis and Design Methodologies including Effect of Seismicity on the Underground Structure.

Tunnel & Cavern Construction Technologies and Equipment

- Construction Methodologies for Tunnels, Caverns, Underground Storages including Remedial Measures for Large Collapses;
- Tunnelling in Urban Areas - Cut & Cover method and TBM Tunnelling
- Cut and cover construction above the bored Tunnel.
- Soft Ground Tunnelling including Shotcrete Methods;
- New Developments – TBM Performance and NATM Experiences;
- Trenchless Technology – Practice and Evaluation;

Risk Management

- Better Preparedness against Tunnel Related Natural Hazards;
- Risk Analysis and Decision-making Techniques for Large Underground Projects.

Environmental and Social Impacts

- Environmental and Social Impact Assessment of Underground Works and their Norms and Methodologies;
- Environmental Control in Tunnel/Cavern and Underground Spaces;
- Effective Ventilation in Tunnels and Practices.

Safety Issues – Standards and Policies

- Fire Safety Arrangement and Measures in Tunnels and Transport;
- Safety Standards and Policies in Different Countries and New Developments.
- Traffic Management while construction of underground space.

Contract Management and Financing of Underground Construction Works

- Costing and Contractual Practices in Tunnel and Underground Works including Aspects of Measurements and Payment;
- Experience and Structure of Model Contract Document;
- Project and Equipment Financing of Build Operate Transfer (BOT) Projects;

Research & Development

- Robotisation of TBM Tunnelling

INDUSTRY SPECIAL ASPECTS

In addition, the following Tunnel and Underground Industry special aspects will also be covered during the conference

EXCAVATION :

1. Mechanised Tunnelling Equipment

Tunnel Boring Machines

- ❖ Case Histories for tunneling in Urban areas
- ❖ Monitored disk cutters
- ❖ Cutter optimization
- ❖ Large diameter TBM
- ❖ Solution for Mechanised Tunnelling

2. Drill and Blast Method

Roadheaders

- ❖ Use of road header in tunnel and underground construction
- ❖ Instrumented road headers
- ❖ Tool optimization
- ❖ Conquering different ground

3. Innovation in Concrete Pumps, Formwork, Ventilation Fan and Instruments for Underground Construction

4. Materials

- ❖ Innovation in materials, segments and shotcrete
- ❖ Future development of shotcrete lining and associated methods
- ❖ Innovation in materials, segments and shotcrete
- ❖ Speed Dam/ Smart Dynamic Concrete
- ❖ Use of Fibres (plastic and steel) for fire control

5. Waterproofing

- ❖ Overview of the Waterproofing for Tunnels and Underground Structures
- ❖ Waterproofing Methods and Case Histories : Injections, Pre-grouting, Membrane Sheets, Spray-on Water Proofing Membranes
- ❖ Composite Tunnel Lining,
- ❖ Contractual Aspects, Liability and Costs
- ❖ Fire protection during Construction and Consequences during Operation

WHO SHOULD ATTEND?

The conference will be of interest to Tunnel Designer & Operators, Engineers, Geologists, Regulatory Bodies, Government Departments,

Tunnel Building Contractors & Consultants, Suppliers of Products & Services for Tunnelling Construction, Fire Authorities dealing with Infrastructure Tunnels, Technical and Research Institutes, Universities dealing with Tunnelling, Organization & Associations active in the Tunnelling World and Funding Agencies.

CALL FOR PAPERS/CASE STUDIES

The papers/case studies on the subject are invited. Intending authors may send full text of paper(s)/case study(ies) as per the guidelines/instructions given below so as to reach the Conference Secretariat by **31st December 2012**. The papers/case studies accepted for presentation will be notified immediately thereafter. Only original contributions that have not been published or presented at any other conference/symposium/seminar are acceptable, otherwise the paper will not be considered. The full length paper will be reviewed by the Technical Committee for oral presentation.

An important condition of acceptance of paper is that the author/one of the authors in case of multiple authors will attend the conference and present the paper. The full length paper will only be included in proceedings volume of the conference if the Registration Fee of an author, as specified, is paid in advance along with the full length paper. The person intending to contribute paper(s) and or to participate in the conference are required to fill-up the Preliminary Registration Form and return it to the Organising Secretary with registration fees.

GUIDELINES FOR PREPARATION OF PAPERS/CASE STUDIES

The full text of the paper prepared on Standard Bond Paper (good quality paper) of A4 (210 mm x 297 mm) size, after having been scrutinized and accepted, will be printed by offset process. Therefore, the text of the paper in English must conform strictly to the following requirements and be free from errors.

Top/Bottom Margin	:	25 mm (Top margin on first page 35 mm)
Left/Right Margin	:	25 mm
Typing Area	:	130 mm x 200 mm (including folio), single space, single column
Total Pages	:	12-14 pages including figures, tables, photographs, etc., if any
Font Type	:	Helvetica/Times Roman
Title	:	14 Point BOLD CAPITALS
Author's Name	:	12 Point BOLD Upper lower (below title of the paper). Do not prefix name with Mr./Ms./Dr./Prof.
Affiliation (designation, organisation and place)	:	11 Point italics
Main Headings	:	10 Point Bold Capitals
Sub Headings	:	10 Point Bold Upper-lower
Text	:	10 Point normal
Print	:	Laser Print or Letter Quality.

The paper title (brief and specific), name(s) of author(s) and affiliation and address, centre justified, should be typed in a space of 50 mm from the top margin on the first page. The paper should begin with a synopsis of not more than 200 words, describing the aims of work, methods adopted, results obtained and conclusions.

Type the headings, subheadings and paragraphs aligned with the left-hand margin. Both side justified text is preferred. Use double space between paragraphs and between section headings/subheadings and paragraphs. Do not number paragraphs, but number section and subsectional headings except synopsis in conformity with established convention.

SI units should be used as far as possible in the text, figures and tables. Where use of their units can not be avoided, their equivalent in SI units should be given within parentheses.

Standard and universally accepted abbreviations should be used. When a special abbreviation appears in the text for the first time, it should be accompanied by its extended form. All symbols and mathematical formulae included in the text should preferably be typed using scientific and mathematical typeface or alternatively be inserted in black ink. Symbols should be explained in the text.

Figures should be drawn in black Indian ink on translucent paper or acetate material (Gateway Tissue) with lettering of appropriate size using stencils. The figures should be placed nearest to the first reference in the text and should not be larger than the print areas.

Photographs on glossy paper may be included if absolutely necessary, with appropriate caption, and should be typed in original typescript where photograph(s) is/are to appear. Lettering should be of same size as the typeface of the text matter.

Tables in the manuscript should be numbered consecutively and referred to in the text by their numbers. A suitable heading should also be provided. References should follow the text and are to be listed at the end in numerical order with the corresponding number cited in brackets at appropriate places. At the end of the references, the author(s) must furnish Bio-data not exceeding 100 words.

An IBM compatible computer CD in conformity with the above is also required to be sent. The electronic copy should be prepared by using MS Word (suitable for windows).

SCHEDULE

- Submission of Papers" **31st December 2012**
- Intimation of acceptance of Papers" **15th January 2013**

OFFICIAL LANGUAGE

The official language of the Conference is English.

DATE & VENUE

The conference is proposed to be held at India Habitat Centre, Lodhi Road, New Delhi during 26-28 February, 2013.

REGISTRATION

The registration fee payable by the delegates, including authors of papers, for participation in the conference is as follows:

Countries	Delegate/ Authors	Research Students	Accompanying Persons
India	Rs. 12,000*	Rs. 6,000*	Rs. 6,000*
Others	US\$ 700*	US\$ 350*	US\$ 300*

* Service tax extra @ 12.36%.

10% discount will be applicable to Members of TAI/CBIP

The registration fee covers admission to all official functions, technical sessions, one set of pre-session papers, lunch and tea/coffee in between technical sessions and official dinner.

The Registration for accompanying persons will cover admission to all official lunches, cultural programmes and dinner.

EXHIBITION

The "TUNNEL Expo 2013" will be held on February 26-28, 2013, in Charminar Area, India Habitat Centre, Lodhi Road at New Delhi, in conjunction with the Tunnelling Asia where participants' daily Tea/Coffee will be served exclusively. The exhibition will provide a scope to present the new technologies, materials and mechanisms including software. Participants will enjoy sufficient time and opportunity to inspect the exhibition, and exhibitors will have an excellent opportunity of accessing a large number of potential buyers/decision makers each day. Built-up stalls in octonorm style complete with basic facilities are available in sizes 3 x 3 sq. mtr. and 3x 2 sq. mtr. The stall will be allotted on first-cum-first served basis.

Exhibition Participation Fee

Tariff for SAARC countries : INR 9000 per sq. mtr. + Service tax @ 12.36%

Tariff for other countries : USD 400 per sq. mtr. + Service tax @ 12.36%

- Schedule for Exhibition : Exhibition Installation Feb. 25, 2013 (Night)
- Exhibition Dismantlement from 6 pm on Feb. 28, 2013

