

# China Tunnel Summit 2008

## 中国隧道国际峰会

Achieve Safety Construction and Operation in Tunnel Projects with  
New Design Concept, Advanced Techniques and High-Performance Materials

20-21 March, 2008

Venue: Millennium Hongqiao Hotel Shanghai, China

### Key issues to be covered

- Advanced design concept which meets the needs of tunnel safety
- Application of advanced technologies and equipments in geographical survey and tunnel construction
- Ventilation and disaster prevention systems in tunnel projects
- Operation and Management of road tunnels
- Research and Experiences of domestic and overseas tunnel projects

### Organizer



### Official Media Supporter



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### Your eminent speaker panel

**Martin Knights**  
President  
**International Tunnelling and Underground Space Association (ITUSA)**

**Sun Jun**  
Academician  
Honorary Professor  
**Tongji University**

**Dr. Warren Wangryul. Jee**  
Tunnel Specialist  
**Korean Institute of Construction Technology (KICT)**  
Adjunct Professor  
**Hanyang University**

**Arnold Dix**  
Chairman of Contractual Practices Group  
**International Tunnelling and Underground Space Association (ITUSA)**

**Xia Yongxu**  
Professor  
**Chang'an University**  
Center Director  
**Tunnel Safety Research Center**

**Yan Jingyi**  
Associate Chief Engineer  
**Beijing Jiaoke Highway Surveying, Design and Research Institute**  
Board Member  
**CHTS-Tunnel Engineering Society**

**Bernt Freiholtz**  
Senior Tunnel Engineer  
**Swedish National Road Administration**

**Marc Tesson**  
Head of Safety Department  
**Centre d'Etudes des Tunnels (CETU)**

**Dr. Alan N Beard**  
Professor  
**Heriot-Watt University**

**Xia Caichu**  
Professor  
**Tongji University**

**Sangjo Moon**  
Executive Director  
**Yooshin Engineering Corporation**

**Hwang Nak Yeon**  
Senior Vice President  
**Yong-il Kim**  
Chief Researcher,  
**DAEWOO E&C**

**Han Zhi**  
Manager of Traffic Engineering  
**Chongqing Communications Research and Design Institute**

**Yoshikazu OTA**  
Managing Director  
**OTA Engineering**

For enquiry sponsor & exhibitor opportunities, Please contact Mr. Boris Xiong  
for detail information  
Tel: 86 21 6247 8898, Email: boris.xiong@merisis-asia.com

## Day One Thursday 20th March 2008

0830 Registration

0850 Opening address from the Chairman

0900 SESSION ONE

### **Amending Standards and Exploring Advanced Technologies to Improve Safety in Tunnel Construction**

- General situation of global tunnel construction
- Safety standards and policies in different countries and new developments
- Introduction of latest advanced technology

**Martin Knights**

President

**International Tunnelling and Underground Space Association**

0945 SESSION TWO

### **Developing Reasonable Design Concept to Meet the Needs of Tunnel Safety - with Swedish Examples**

- Tunnel safety involving in design
- Risk analysis
- Risk evaluation
- Software solutions in design of tunnels

**Bernt Freiholtz**

Senior Tunnel Engineer

**Swedish National Road Administration**

1030 Refreshment Break & Networking Opportunity

1100 SESSION THREE

### **Progress China Has Made in the Construction of Mountain Tunnel Projects**

- Progress in tunnel design and geotechnical survey
- Progress in manufacture of TBMs and Shield Machines
- Progress in ventilation system and disaster prevention system

**Sun Jun**

Academician

Honorary Professor

**Tongji University**

1145 SESSION FOUR

### **Long Tunnel Designed by High Power TBM**

- Long tunnel design and construction
- High-power TBM
- Hard Rock TBM
- Tunnel Safety
- Tunnel Construction methods

**Dr. Warren Wangryul. Jee**

Tunnel Specialist

**Korean Institute of Construction Technology (KICT)**

Adjunct Professor

**Hanyang University**

1230 Luncheon

1330 SESSION FIVE / CASE STUDY

### **Analysis of TBM and Drill-and-Blast in Large Diameter and Long Distance Tunnel Construction**

- Comparison of engineering feature
- Ensure the quality and save the cost in tunnel project
- Latest Tunneling Technology
- Cases in Korea

**Hwang Nak Yeon**, Senior Vice President

**Yong-il Kim**, Chief Researcher

**DAEWOO E&C**

1415 SESSION SIX

### **Achieving Operation Safety in Road Tunnels – with European Experience**

- Overview the European tunnels operation
- Main factors caused tunnel accidents
- Measures to reinforce safety in tunnels
- Case Study

**Marc Tesson (To Be Confirmed)**

Head of Safety Department

**Centre d'Etudes des Tunnels (CETU)**

1500 Afternoon refreshments & networking break

1530 SESSION SEVEN

### **New Approaches to Managing Construction and Operational Risks in Tunnels**

- The fundamental importance of ground conditions in contracts and practice
- The new ITIG Insurance code of practice for construction risk management
- Recognizing the human factors in successful tunnel construction and operation
- Embracing cultural differences in safe tunnel operations
- Realistic and sustainable risk apportionment

**Arnold Dix**

Chairman of Contractual Practices Group

**International Tunnelling and Underground Space Association**

1615 SESSION EIGHT

### **Current Situation of Health Diagnosing at Highway Tunnel Projects**

- Analysis on factors of tunnel hazards
- Application of non-destructive testing technologies
- Case study

**Xia Caichu**

Professor

**Tongji University**

1700 Closing remarks from Chairman and end of Day One

## Day Two Friday 21st March 2008

0830 Registration

0850 Opening address from Chairman

0900 SESSION ONE  
**Tunnel Fire Safety: Prevention, Protection and Ventilation**

- Effects of ventilation on heat release rate
- Prevention as part of tunnel safety design
- Protection as part of tunnel safety design

**Dr. Alan N Beard**  
Reader in Fire Safety Engineering  
**Heriot-Watt University**

0945 SESSION TWO  
**Safety Design for Road tunnel " On the Point View of Universal Concept"**

- Long road tunnel safety
- Traffic safety
- Ventilation and smoke control
- Fire protection design
- Rescue operation

**Yoshikazu Ota**  
Managing Director  
**OTA Engineering**

1030 Refreshment Break & Networking Opportunity

1100 SESSION THREE  
**Ventilation System and Disaster Prevention System in China's Road Tunnels**

- Ventilation methods used in China's road tunnels
- Safety system in road tunnels
- Disaster prevention and rescue

**Xia Yongxu**  
Professor  
**Chang'an University**  
Center Director  
**Tunnel Safety Research Center**

1145 SESSION FOUR / CASE STUDY  
**Safety Guidelines of Long Traffic Tunnels in Korea**

- Long traffic tunnels in Korea
- Affect of Daegue subway accident to the safety guidelines in Korea
- Case study of safety design in Korea

**Sang- jo Moon**  
Executive Director  
**Yooshin Engineering Corporation**

1230 Luncheon

1330 SESSION FIVE / CASE STUDY

**Design of Intelligent Monitoring and Control System in Large Diameter and Long Distance Tunnel**

- Component of intelligence monitoring and control system
- Rationality and feasibility of the arrangement of intelligence monitoring and control system
- Problems remine in design and application of intelligence control system

**Yan Jingyi**  
Associate Chief Engineer  
**Beijing Jiaoke Highway Surveying, Design and Research Institute**  
Board Member  
**CHTS-Tunnel Engineering Society**

1415 SESSION SIX  
**Promoting Green Lighting to Achieve Driving Safety and Energy Saving in Highway Tunnels**

- The concept of Green Lighting
- Standards of illumination of highway tunnels
- LED illumination in tunnel projects

**Han Zhi**  
Manager of Traffic Engineering  
**Chongqing Communications Research & Design Institute**

1500 Afternoon Refreshments & Networking Break

1530 SESSION SEVEN  
**Improving Concrete Structure to Prolong Concrete Durability in Tunnels**

- Main factors which affect the concrete durability
- Select raw materials
- Design of mixing proportion of concrete
- Methods taken in construction, testing, inspection and maintenance

**Dr. Tosihara Kishi**  
Associate Professor  
**University of Tokyo**

1615 SESSION EIGHT  
**Study on Concrete Durability in the Seawater Enviornment - Jiaozhou Bay**

Jiaozhou Bay tunnel, the second submarine tunnel built in China, is under construction now. It will take 3 or 4 years to complete the project. The tunnel will connect the downtown Qingdao and the west shore of Jiaozhou Bay.

**Zhao Jizeng** (to be confirmed)  
Chief Engineer  
**Qingdao Conson Industrial Corp.**

1700 Closing remarks from Chairman and end of Day Two

# China Tunnel Summit 2008

## Why Should Attend

To get latest information of tunnel construction and operation, raise the level of engineering technique and ensure the projects quality, Merisis organize this summit to meet the demand of tunnel market. The overall theme of the summit is Safety Construction and Operation. The summit will bring together scholars, senior experts and elite with rich practical experience in tunneling area to evaluate the past, analyze the present and forecast the future of the industry. It's really a good opportunity to study together, exchange academic achievements, discuss issues both in theory and application, share experiences and get valuable information.

## Who Should Attend

Chairman / President / Vice president  
Chief Operation Officer  
Chief Engineer  
Director - Business Development  
Director - Procurement  
Engineering/Legal /Financial Consultant

CEO / Executive Director / General Manager  
Chief Technology Officer  
Director- Strategy Development  
Director - Marketing / Sales  
Investor and Banker

## From

Tunnel Survey & Design Institute / Company  
Tunnel Operation and Maintenance Company  
Tunnel Contractors  
Projects Design Software Providers  
Instruments Manufacturers / Agents  
Technology and Solution Providers

Tunnel Construction Company  
Tunnel Construction and Maintenance Supervisors  
Engineering Consulting Company  
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## About Merisis

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