

November 29-30 & December 1-2, 2010  
 InterContinental Shanghai Pudong Hotel

www.bridgetechsummit.com

# Bridging Techn 2010

## Technology Outlines a Blueprint for Future Bridges

- ✦ Perfect Combination of Aesthetics and Functionality
- ✦ Prosperous Integration of Innovation and Safety

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Zurich, June 8, 2010

To whom it might concern

With the support of key authorities, "Bridge Tech 2010" will be held from 29th November to 2nd December 2010 in the Intercontinental Shanghai Pudong Hotel, China. It is co-organized by the Jiangsu Transportation Research Institute, the PRC Ministry of Communications and the Global Leaders Institute.

The International Association for Bridge and Structural Engineering (IABSE) confirms herewith support for **BRIDGE TECH 2010** and agrees to be listed as

**Official Supporter of BRIDGE TECH 2010**

**BRIDGE TECH 2010** shall offer the attendees a face-to-face communication chance with high-level officials, business leaders and experts from the global bridge industry. While sharing strategic ideas with each other, attendees can discuss hot issues to gain valuable insight into China's bridge industry, and will get a better understanding of the world bridge market.



Ueli Brunner  
Executive Director, IABSE

# Key Issues in 2010

- ★ The status quo and development trend of bridges industry
- ★ Current investment policy and new bridge projects in China
- ★ Bridge safety consideration under technological innovation
- ★ Bridge life-cycle cost design and applications
- ★ Bridge health monitoring and maintenance
- ★ Advanced bridge construction materials and equipment
- ★ Case sharing of world class bridges

## Bridge Tech 2010 offers you

**W**orldwide attendees from 20+ countries and regions who specialize in various fields related to bridge industry.

**O**pportunities that acquire latest information for your strategic decision making process that you can neither get from internet nor industry reports because it's first-hand.

**N**etwork effectively with your potential clients in comfortable and relaxing way such as cocktail party, coffee breaks and luncheon in 5-star hotel as well as bridge tour.

**D**istinguished speakers who are carefully researched and invited in order to guarantee this conference be notable for its high-level, international impact and archival quality.

**E**xposures on the media that you will be reported and interviewed like a star by 30+ Industry Media worldwide if you wish to.

**R**enowned bridge case sharing such as Hangzhou Bay Bridge, Sutong Bridge etc.

**F**riends who you share and express same perceptions and hungers with because "Great minds think alike".

**U**nparalleled platform where you can efficiently showcase your latest products, solutions and technologies in front of 150+ decision makers.

**L**essons where you can understand the up-to-date management ideas and technologies being applied from 30+ speeches, constant interactions and panel discussions.

## Experience

, just join & enjoy one-stop-shop for bridge!

" Bridge Tech Summit has become one of the most exciting and significant annual events for bridge industry. It provides great opportunity for industry leaders not only from China but also other regions in the world to update their knowledge and exchange industry information."



**Yang Genlin**  
General Manager  
Jiangsu  
Communication  
Holdings  
Corporation

## NETWORKING & CONTACT

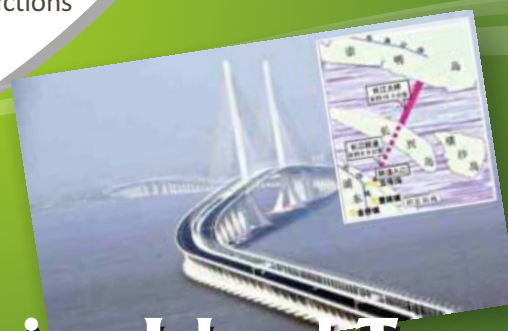
*Relax, Network and Make Contact!*

**Bridge Tech 2010** provides attendees more than 10 hours of precious networking time through perfect surroundings, including coffee and tea breaks, luncheon, cocktail party, and whole day bridge tour.



**Speed networking** is the most exciting part of the conference agenda, enabling you to build more interactive and efficient networking. Prepare enough business cards and join this exciting session to be familiar with as many new contacts as you can, with which consequent partnership will flourish for mutual success.

The 4th day visit will be arranged to cross Shanghai Changjiang Tunnel Bridge and arrive at its end: Chongming Island. This will help delegates have deeper communication while enjoying the masterpiece of modern bridge, as well as the idyllic scenery.



## Bridge & Chongming Island Tour

# Main Speakers



**Predrag Popovic**  
President Elect  
**International Association  
for Bridge and Structural  
Engineering (IABSE)**



**Delmar J. Doyle**  
Interim Executive Director  
**NACE International**



**C.K. LAU**  
Former President/Executive  
Director  
**Highways Department, Hong  
Kong/AECOM**



**Yang Genlin**  
General Manager  
**Jiangsu Communication  
Holdings Corporation**



**Chen Mingxian**  
Secretary of Party  
Committee  
**Hunan Provincial  
Transport Department**



**TAM Hon Choi**  
Chief Engineer of Hong Kong-  
Zhuhai-Macao Bridge  
**Hong Kong Project  
Management Office  
Highways Department Hong  
Kong**



**Urs Meier**  
Deputy Director  
**Swiss Federal Laboratories  
for Materials Testing and  
Research (EMPA)**



**Shao Xinpeng**  
Chief Engineer  
**Qingdao Bay Bridge  
Command**



**Su Quanke**  
Chief Engineer  
**Advance Work Coordination  
Group Project Office of  
Hong Kong-Zhu Hai-Macao  
Bridge**



**Meng FanChao**  
Deputy General  
Manager/Chief Designer  
**CCCC Highway  
Consultants Co., Ltd./  
Hong Kong-Zhuhai-Macao  
Bridge project office**



**Naeem Hussain**  
Worldwide Bridge Leader  
**Arup**



**Tao Hongyi**  
General Manager for China  
**Dorman Long Engineering  
Technology Consultant  
(Shanghai) Co.Ltd.**



**Huang Shaowen**  
Chief Engineer  
**Shanghai Changjiang Tunnel  
& Bridge Construction**



**Motoi Okuda**  
Senior Director of Long-span  
Bridge Engineering Center  
**Honshu-Shikoku Bridge  
Expressway Co., Ltd**



**Xu HongGuang**  
Vice President/Chief Designer  
**Anhui Communication  
Consulting & Design  
Institute/  
Anhui Ma'anShan Yangtze  
River Bridge Project Office**



**Li Na**  
Professor/Senior Engineer  
**CCCC Highway Consultants  
CO.,Ltd.**



**Pascal Savioz**  
General Manager  
**Mageba (Shanghai) Bridge  
Products Co.,Ltd**



**Pascal Savioz**  
General Manager  
**Mageba (Shanghai) Bridge  
Products Co.,Ltd**



**Agostino Marioni**  
Managing Director  
**ALGA**



**Manuel Friedel**  
Head of Research &  
Development and Technical  
Service Building Protection  
**Evonik Industries, Germany**



**Yutaka Kobayashi**  
Head of Business Development  
Department  
**Nippon Yakin Kogyo Co., Ltd**

# Conference Agenda

Day One

Monday, November 29, 2010



## Conference Pre-Workshop A: Bridge Anti – Corrosion

## Conference Pre-Workshop B: Safety & Monitoring of Bridges

### 1330 Corrosion Mitigation — Design and Repair to Limit Impact of Corrosion

- ❖ Cost of corrosion
- ❖ What to do in the design of bridges
- ❖ How to reduce corrosion during construction
- ❖ Inspection of older bridges

**Delmar J. Doyle**, Interim Executive Director  
NACE International, USA

### Structural Health Monitoring and Safety Evaluation of Cable-Supported Bridges

- ❖ The importance of Structural Health Monitoring in the Bridge Supervision and Post-construction
- ❖ The significance and specific indicators of Monitoring Evaluation

**Wong Kai Yuen**, Bridge Technical Advisor of Bridges and Structures Division  
Highways Department, Hong Kong

### 1430 Anti-corrosion: Guarantee of Extending Bridge Life-span

- ❖ The requirement of anti-corrosion on the condition of climate, hydrology, topography and geologic framework
- ❖ The standard of protective coating and construction technique
- ❖ The anti-corrosion of epoxy reinforcing steel

**Shao Xinpeng**, Chief Engineer  
Qingdao Bay Bridge Command

### The key technology research of Structural Monitoring of Suspension bridge across the sea and Inspection Management

- ❖ The Reaction of Environmental load and the Status and Structure of Bridge to Real Time Monitoring
- ❖ The Real Time Processing Analysis of Data is good to know the structural usage status of Bridge
- ❖ The Successful Application of Xihoumen Bridge Construction and Operation Management

**Li Na**, Senior Engineer  
CCCC Highway Consultants CO., Ltd.

### 1530 Coffee Break

### 1545 The new type of protective coating with outstanding durability and ornamentality (sponsor opportunity)

### The application of optical sensors in bridge monitoring (sponsor opportunity)

### 1645 Panel discussion: The integrated application of anti-corrosion technology and material in bridge construction

- ❖ The anti-corrosion of stainless steel bar
- ❖ The construction control technology of protective coating on Steel box girder
- ❖ The anti-corrosion and coating technician of long span bridge concrete structure (high performance, simplicity, economy, energy efficiency and environmental protection)

Moderator:  
**Delmar J. Doyle**, Interim Executive Director  
NACE International, USA

Panelists:  
**Ken Dykes**, Chairman  
The Corrosion Prevention Association (CPA), UK  
**Shao Xinpeng**, Chief Engineer  
Qingdao Bay Bridge Command  
**Xie Daqi**, General Manager  
Shanghai Donghai Bridge Management Co. Ltd.  
**Huang Jinqiu**, President  
Fujian PingTan bridge cooperation

### Panel Discussion: The Latest Technology, Research and Future Prospect of Structural Health Monitoring of Large Bridges

- ❖ The Structural Health and Safety Monitoring System and Design Proposal of Zhujiang HuangPu Bridge
- ❖ Health Monitoring and Non-destructive Inspection Technique
- ❖ Upgrading Project of JiangYin Bridge's Structural Health Monitoring System

Moderator:  
**Wong Kai Yuen**, Technical Advisor of Bridges and Structures Division  
Highways Department, Hong Kong

Panelists:  
**Wang Zhongyu**, Director  
Bridge Engineering Research Center, Taiwan  
**Motoi Okuda**, Director of Engineering Center of Long-span Bridge  
Honshu-Shikoku Bridge Expressways Co., LTD, Japan  
**Zhang Shaojin**, General Manager  
Guangzhou Zhujiang Huangpu Bridge Construction Co., Ltd.  
**Zhong Jianchi**, Chief Commander  
Jiangsu Taizhou Yangtze River Bridge Project Command

### 1745 The end of workshop

- ❖ Note: Conference Pre-workshops are intensive and interactive sessions that are especially designed for those who focused on the hottest issues of Bridge Tech 2010 this year. It provides unique opportunities to spend valuable time with industry experts, deeply discussing the detailed problems, solutions, innovations etc.

# Conference Agenda

Day Two

Tuesday, November 30, 2010

## Morning Session: The Current Landscape and Future Development Trend of World Bridge Industry

### 0845 Opening Address

**Xiang Haifan**, Director General  
Bridge and Structural Engineering Branch, China Civil Engineering Society

**Fu Guanhua**, CEO  
Jiangsu Transportation Research Institute

### 0900 The Current of Bridge Construction Development and Current Investment Policies within China's Bridge Industry

- ❖ The importance of bridge construction to the infrastructure and economic benefits
- ❖ Projects snapshot into 245 planning and undertaking bridge projects

**Feng Maorun**, Deputy Director of the Highway Division of the Committee of Experts  
Ministry of Transport of the People's Republic of China

### 0930 Preventing Structural Failures in Bridge Construction

- ❖ Failure
- ❖ Bridge construction
- ❖ Bridge safety

**Predrag L. Popovic**, President Elect  
International Association for Bridge and Structural Engineering

### 1000 "Technology" Breaks the Record in Bridge Industry

- ❖ Independent technology innovation of bridge engineering in China
- ❖ Technical challenges and developments in Jiangsu bridge projects: Nanjing Yangtze River Bridge; Sutong Bridge; Da Shengguan Nanjing Yangtze River Bridge etc.

**Yang Genlin**, General Manager  
Jiangsu Communication Holding Corporation

### 1030 Coffee Break



### 1100 Schematic Studies on the 2nd Bridge of Dongting Lake in Yueyang

- ❖ Project overview and evaluation of construction conditions
- ❖ Technical breakthrough in the research areas of seismic performance, wind resistance, driving comfort etc.

**Chen Mingxian**, General Secretary  
Hunan Provincial Transport Department

### 1130 Technology Solutions of the integration of Bridge Design, Construction and Maintenance (sponsorship opportunity)

### 1200 Luncheon

## Afternoon Session: Engineering Technology Exploration for HongKong-Zhuhai-Marco Bridge

### 1345 Overall Plan of Hong Kong - Zhuhai - Macao Bridge: Large-scale Cross-Sea Project with High Quality

- ❖ Planning and control during the bridge design, construction, maintenance, resource management and equipments etc
- ❖ Bridge construction cooperation between three regions & the integration of island works, road bridge and tunnel Engineering

**Su Quanke**, Chief Engineer

**Hong Kong - Zhuhai - Macao Bridge Advance Work Coordination Group Project Office**

### 1415 The Engineering and Environmental Challenges of the Hong Kong Link Road

- ❖ The Strategic importance and economical benefits of the Hong Kong Zhuhai Macao Bridge
- ❖ Alignment Selection of the Hong Kong Link Road
- ❖ Engineering Challenges
- ❖ Environmental Challenges

**Tam Hon-choi**, Chief Engineer of Hong Kong-Zhuhai-Macao Bridge  
Hong Kong Project Management Office

**Highways Department, Hong Kong**

### 1445 The research and design for main works HongKong-Zhuhai-Macao Bridge

**Meng FanChao**, Deputy general manager/Chief Designer  
CCCC Highway Consultants Co., Ltd., /Hong Kong-Zhuhai-Macao Bridge

### 1515 The Combined Solution for the Durability of Hong Kong-Zhuhai-Marco Bridge (sponsorship opportunity)

### 1530 Coffee Break



### 1545 The recent development of bridge technology in Hong Kong

**C.K. LAU**, Former President/Executive Director  
Highways Department, Hong Kong/AECOM

### 1615 Design Concepts and Technical Support of Famous Bridges in Denmark

- ❖ The Great Belt
- ❖ Oresund Bridge
- ❖ Femer Bridge - Planning project between Denmark and German

**Anton Peterson**, Director of Bridge and Marine Transport Infrastructure

**COWI, Denmark**

# Conference Agenda

Day Two-Three *Tuesday, November 30*  
*Wednesday, December 1, 2010*

1645 **Integrated Programs of Large-scale Bridge Construction Supervision and Post-monitoring System (sponsorship opportunity)**

1715 **Panel Discussion: Technical Difficulties of New Bridges being Construction**

*Moderator:*

**Li Wanheng**, Director of Bridge Division, Research Institute of Highway

**China's Ministry of Transportation**

*Panelists:*

**Anton Peterson**, Director of Bridge and Marine Transport Infrastructure

**COWI, Denmark**

**Zhong Hai**, Deputy Executive Director

**Zhejiang Jiaxing - Shaoxing Cross-sea Bridge Construction Command**

**Wang Mingluan**, General Manager

**Fujian Xiamen - Zhangzhou Bridge Construction Co., Ltd.**

1745 **Workshop C:**

**Basics about Carbon Fiber Reinforced Polymers (CFRP) for Bridge**

**Engineers**

- ❖ Why CFRP
- ❖ Production and properties of cable fibers
- ❖ Pultrusion of CFRP: the most important process for bridge engineering
- ❖ Reliability of CFRP
- ❖ CFRP parallel wire bundles for high load-carrying capabilities
- ❖ Pin-loaded CFRP tendons for small to medium load-carrying capacities
- ❖ UV resistance
- ❖ Fire resistance
- ❖ How to avoid problems with lightning strikes
- ❖ High equivalent modules of CFRP stays
- ❖ Summary: Advanced versus disadvantages of CFRP in bridge engineer

**Urs Meier**, Deputy Director

**Swiss Federal Laboratories for Materials Testing and Research (EMPA)**

1815 **End of DAY TWO**

**Day Three** *December 1, 2010*

**Morning Session: The Application of Advanced Materials and Equipment in Bridge Engineering**

0900 **The World's Top Engineering Created by Independently Developed Equipments in China**

- ❖ The whole spiral steel pipe pile
- ❖ Specific pile driving boat: the largest and most advanced piling boat in Asia
- ❖ Equipment transit above 50 meter box girder

**Zhu Yaohong**, Deputy Chief Engineer

**Hangzhou Bay Bridge Construction Command**

0930 **Carbon Fiber Reinforced Polymers (CFRP) Cables: An Enabling Technology for Very Long-Span Bridges**

- ❖ The long-term experience with CFRP in bridge rehabilitation and new construction
- ❖ The opportunities for CFRP in bridge construction in present time
- ❖ The challenges for very-long span bridges in the future

**Urs Meier**, Deputy Director

**Swiss Federal Laboratories for Materials Testing and Research (EMPA)**

1000 **Research and Application of Special Equipment for Steel Box Girders Lifting**

- ❖ Lifting equipment for supporting span and lumpy girder
- ❖ Standard beam section lifting

**Yao Pei**, General Manager

**Sutong Bridge Construction Co., Ltd.**

1030 **Coffee Break**



1045 **The technical tops of Shanghai Changjiang Tunnel Bridge**

- ❖ The longest tunnel and bridge combination construction in the world at present: Bridge, tunnel and railway
- ❖ The design of the biggest separated full-floating long span cable-staged bridge carrying both highway and light rail
- ❖ Long-span continuous combination box girder bridge and prefabricated pier extending construction
- ❖ Large-scale subgrade used of sands under river for the very first time

**Huang Shaowen**, Chief Engineer

**Shanghai Changjiang Tunnel and Bridge Construction and Development Co., Ltd.)**

1115 **Equipment Innovation and its Application in Bridge Engineering (sponsorship opportunity)**

- ❖ Expansion joint device type and the installation
- ❖ Technology innovation of bridge girder erection machine

# Conference Agenda

Day Three-Four *Wednesday, December 1*  
*Thursday, December 2, 2010*

## 1145 Panel Discussion: Applications of Anti-corrosion and Waterproof Materials in Bridge Construction

- ❖ Seamless spray applied in bridge deck waterproofing
- ❖ Stainless steel rebar to solve the corrosion problem

*Moderator:*

**Jean-Marc Tanis**, Chairman, Association of French Civil Engineering (l'AFGC)

*Panelists:*

**Kim Kyong Jim**, Director

**Korea Institute of Construction Technology**

**Cai Yisheng**, General Manager

**Guangdong Nan'ao Bay Bridge Construction Company**

**Xie Daqi**, General Manager

**Shanghai Donghai Bridge Management Co., Ltd.**

1200 Luncheon

## Afternoon Session: The Technology Innovation for both Bridge Safety and Aesthetics

### 1400 The Bridge Design Research Based on the Life-cycle Cost Assessment

- ❖ The Content of Bridge Life-cycle Assessment (Design, Performance, Ecology, etc.) and the Tools (Cost Analysis, Risk Assessment, etc.)
- ❖ The Systematic Decomposition Method and Criteria for the Entire Life of Bridge Construction
- ❖ The Information Integration of Life-cycle for the Whole Bridge Construction Project

**Gao ZongYu**, Chief Engineer

**China Railway Major Bridge Reconnaissance & Design Institute CO.,Ltd.**

### 1430 Forth Replacement Crossing Scotland

**Naeem Hussain**, Worldwide Bridge Leader

**Arup**

### 1500 Incremental Launching Method Applied in Combined Bridges Construction

- ❖ Design difficulties and innovative ideas of composite bridge structures
- ❖ Incremental launching method principles and key construction techniques
- ❖ Case study: Hangzhou Jiubao arch bridge -- China's first large-scale cross-river composite bridge using incremental launching method

**Cheng Xiaodong**, Deputy Chief Director

**Zhejiang Hangzhou Jiubao Bridge Construction Command**

1530 Coffee Break



### 1545 The structure system study of left main branch for Ma'AnShan Yangtze River Bridge

**Xu HongGuang**, Vice President/Chief Designer

**Anhui Communication Consulting & Design Institute/Anhui Ma'anshan Yangtze River Bridge Project Office**

### 1615 Pre-stressing System for Bridge Engineering (sponsorship opportunity)

### 1645 Bridge Condition Diagnosis and Reinforcement Assessment

- ❖ Diagnostic Techniques for bridge fatigue damage and prediction of remaining life
- ❖ Advanced sensors and its optimization layout for bridge structural inspection

**Motoi Okuda**, Senior Director of Long-span Bridge Engineering Center

**Honshu - Shikoku Bridge Expressways Co., Ltd. (HSBE), Japan**

### 1715 Water resistance technology in bridge construction and its corresponding solution

- ❖ Multifunctional and high-performance, waterproof and environment-friendly coating
- ❖ Structural defect of concrete bridge deck and waterproofing system
- ❖ Seamless spray applied in bridge deck waterproofing
- ❖ Case study: The "rainwear" of Caiyuanba Bridge

**Zhao Jianfa**, Deputy General Manager

**The Sixth Engineering Bureau, China Railway Engineering Corporation (CREC)**

1745 End of summit

## Day Four

December 2, 2010

## Bridge Tour

Shanghai Changjiang Tunnel Bridge & Chongming Island Tour

