

Program

Shotcrete for Underground Support XIV

**November 17-20, 2019
Thailand,
Nong Nouch Garden, Pattaya**

Conference Chair

Dr.-Ing. Matthias Beisler
ILF Consulting Engineers (Asia) Ltd.
Bangkok

Conference Co-Chairs

Mr. Preedee Ngamsantikul
Thailand Underground and Tunnelling
Group
Bangkok

**Prof. em. Dr.-Ing. Dr. h. c. Herbert
Klapperich**
TU Freiberg
Germany

Honorary Chair
Prof. Tarcisio Celestino
ITA president

Guest of Honour
Prof. Chuchai Sujivorakul
King Mongkut's Institute of Technology
Thonburi, Thailand



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Sunday, November 17, 2019

12:00 – 15:00 Arrival of international delegates at Nong Nouch Garden and hotel check-in

15:00 - 15:30 Gathering at meeting point

15:30 - 16:00 Introduction to Nong Nouch Garden and walk to Theater area

16:00 – 16:30 Thai Cultural Performances at Nong Nooch Theater



16:30 – 17:00 Nong Nooch Elephant Show



17:00 - 18:30 Walk to conference area

18:30 – 19:00 Conference Check-in

19:00 – 21:30 Opening Reception, dinner, social gathering

Welcome Speeches

- **ECI Liaison**
Herbert Klapperich
Prof. em. Geotechnic, TU Bergak. Freiberg, Germany
- **Conference Chair**
Dr. Matthias Beisler
Managing Director ILF Consulting Engineers (Asia) Ltd.

Notes

- Keynote speeches and technical presentations on Monday and Tuesday will be held at the conference center of Nong Nooch Tropical Garden
- Audiotaping, videotaping and photography of presentations are prohibited.
- The order of the keynote speeches and technical presentations may change upon the discretion of the organising committee.
- Please do not smoke at any conference functions.
- Turn your cellular telephones to vibrate or off during technical sessions.
- Be sure to make any corrections to your name/contact information on the Master Participant List or confirm that the listing is correct. A corrected copy will be sent to all participants after the conference.

Monday, November 18, 2019	
07:30 - 09:00	Breakfast (Restaurant Nong Nouch Garden)
08:00 – 09:00	Registration
09:00 – 09:45	Welcome Speeches
09:00 – 09:15	<ul style="list-style-type: none"> ▪ ECI Liaison Herbert Klapperich Prof. em. Geotechnic, TU Bergak. Freiberg, Germany
09:15 – 09:30	<ul style="list-style-type: none"> ▪ Honorary Conference Chair Prof. Tarcisio Celestino Professor at the University of São Paulo, previous President of the International Tunnelling and Underground Space Association (ITA) and President of the Brazilian Tunnelling Committee
09:30 - 09:45	<ul style="list-style-type: none"> ▪ Guest of Honour Prof. Chuchai Sujivorakul King Mongkut's Institute of Technology Thonburi, Thailand
09:45 – 10:15	Thai Cultural Show
10:15 – 10:45	Coffee break
10:45 – 12:45	Keynote Speakers
10:45 – 11:15	<ul style="list-style-type: none"> ▪ Keynote Speaker 01: Mr. Preedee Ngamsantikul, Dr.Auttakit Asanprakit Introduction of Thailand Underground & Tunnelling Group (TUTG), experiences and challenges in underground engineering in SE Asia
11:15 – 11:45	<ul style="list-style-type: none"> ▪ Keynote Speaker 02: Prof. Marc Jolin, Laval University, Canada Evaluating the cracking potential of shotcrete
11:45 – 12:15	<ul style="list-style-type: none"> ▪ Keynote Speaker 03: Mr. Gottfried Braun, ILF Consulting Engineers Austria GmbH Optimized shotcrete design for irregular tunnel excavation
12:15 - 12:45	Questions & Answers
12:45 – 14:00	Lunch (Restaurant Nong Nouch Garden)
14:00 - 16:00	Technical Session
14:00 – 14:30	<ul style="list-style-type: none"> ▪ Technical Presentation 04: Mr. Martin Eberli, Bekaert Maccaferri Underground Solution Steelfibre for High performance shotcrete, the way to more cost efficiency
14:30 – 15:00	<ul style="list-style-type: none"> ▪ Technical Presentation 05: Mr. Philippe Doriot, Sika Waterproofing Solutions for Tunnels (traditional excavation)
15:00 – 15:30	<ul style="list-style-type: none"> ▪ Technical Presentation 06: Prof. Dr. Junsheng Yang, School of Civil Engineering, Central South Univ., China Design optimization and application of bolt-shotcrete support for East Tianshan tunnel project in China

15:30 – 16:00	Questions & Answers
16:00 – 16:30	Coffee break
16:30 – 18:00	Technical Session
16:30 – 17:00	<ul style="list-style-type: none"> ▪ Technical Presentation 07: Mr. Klaus Bonin, Wacker Chemie AG Performance Improvement of Shotcrete by Polymer Binder Modification
17:00 – 17:30	<ul style="list-style-type: none"> ▪ Technical Presentation 08: Mr. Des Vlietstra, BarChip Inc., Japan Meaningful testing of fibre reinforced shotcrete for lining designs
17:30 – 18:00	Questions & Answers, closing of technical seminars day 1
19:00 – 22:00	Nong Nouch Garden entertainment program & dinner for registered delegates

Tuesday, November 19, 2019	
07:00 - 08:30	Breakfast (Restaurant Nong Nooch Garden)
08:30 - 10:30	Technical Session
08:30 - 8:45	Opening note (conference chair)
08:45 – 09:15	<ul style="list-style-type: none"> ▪ Keynote Speaker 01: Prof. Dietmar Maehner, University of Muenster, Germany Shotcrete of the outer shell and the sealing system
09:15 – 09:45	<ul style="list-style-type: none"> ▪ Keynote Speaker 02: Prof. Marc Jolin, Laval University, Canada Pumping shotcrete: past knowledge applied for modern shotcrete mix design
9:45 - 10:15	<ul style="list-style-type: none"> ▪ Keynote Speaker 03: Dr. Matthias Beisler, ILF Consulting Engineers (Asia) Ltd. Untersammelsdorf Tunnel – Challenges, Special Measures and use of Special Shotcrete for Tunneling in Lacustrine Clay
10:15 – 10:30	Questions & Answers
10:30 – 11:00	Coffee break
11:00 – 12:45	Technical Session
11:00 – 11:30	<ul style="list-style-type: none"> ▪ Technical Presentation 04: Mr. Michael Mett, Dibit Messtechnik GmbH 3D Tunnel Inspection with Photogrammetric and Hybrid Systems
11:30 – 12:00	<ul style="list-style-type: none"> ▪ Technical Presentation 05: Prof. Dr. Junsheng Yang, Central South University, China Stability Analysis and Reinforcement of the Existing Karst Cave Passing through Yujingshan Tunnel
12:00 – 12:30	<ul style="list-style-type: none"> ▪ Technical Presentation 06: Prof. Kyong-Ku Yun, Kangwon National University, South Korea Plastic Shrinkage Properties of Natural Fiber Reinforced Shotcrete
12:30 – 12:45	Questions & Answers
12:45 - 14:00	Lunch (Restaurant Nong Nouch Garden)
14:00 – 15:30	Technical Session:
14:00 – 14:30	<ul style="list-style-type: none"> ▪ Technical Presentation 07: Mr. Eugen Kleen, MC Bauchemie Development of a sprayable geopolymer concrete for fire protection improvement and upgrading of underground traffic structures
14:30 – 15:00	<ul style="list-style-type: none"> ▪ Technical Presentation 08: Mr. Johannes Flotzinger, University of Regensburg, Germany Investigations regarding the pumping process of wet-mix shotcrete improvement and upgrading of underground traffic structures

15:00 – 15:15	Questions & Answers, closing of technical seminars day 2
15:15 – 15:30	Transfer to area of Shotcreting demo
15:30 - 18:00	Practical Shotcreting Demonstration (example) 
19:00 - 19:30	Reception
19:30 - 22:00	Grand Gala Dinner for registered delegates

Wednesday, November 20, 2019

07:00 - 09:00	Breakfast (Restaurant Nong Nooch Garden)
09:00 - 10:45	Technical Session
09:00 - 09:30	<ul style="list-style-type: none"> Technical Presentation 01: Mr. Stefan Eder, ILF Consulting Engineers Austria GmbH Geological 3D Analyses of Tunnel Faces with Software and Hardware tools of DIBIT
09:30 – 10:00	<ul style="list-style-type: none"> Technical Presentation 02: Mr. Lars Vollmert, NAUE GmbH & Co. KG Geotechnical solutions for improved sealing and stabilization of tunnels and reservoirs
10:00 – 10:30	<ul style="list-style-type: none"> Technical Presentation 03: Mr. Chawalit Tanomtin, Right Tunnelling, Thailand Mab Krabao Jira Double Track Tunnel Project, Saraburi Province, Thailand
10:30 -10:45	Questions & Answers
10:45 – 11:15	Coffee break
11:15 – 13:00	Technical Session
11:15 – 11:45	<ul style="list-style-type: none"> Technical Presentation 04: Dr. Florian Patrice Nagel, ILF Consulting Engineers (Asia) Ltd. Off-grid power supply for tunneling and mining employing Renewable Energies
11:45 – 12:15	<ul style="list-style-type: none"> Technical Presentation 05: Dr.-Ing. Bernd Vogl, Aqua2Power AG Energy Sheet Pilings - A milestone for emission free, renewable power production
12:15 – 12:30	Questions & Answers, discussion & outlook Closing ceremony and end of conference
12:30 - 14:00	Optional: Lunch (Restaurant Nong Nouch Garden)

Complimentary program: Guided tour of Nong Nooch Garden

Optional: Boat trip Pattaya area