

11-17-2019

Conference Program

Dr.-Ing. Matthias Beisler

Preedee Ngamsantikul

Dr.-Ing. Dr. h. c. Herbert Klapperich

Prof. Tarcisio Celestino

Chuchai Sujivorakul

Follow this and additional works at: https://dc.engconfintl.org/shotcrete_xiv

 Part of the [Engineering Commons](#)

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



Engineering Conference International
32 Broadway, Suite 314 - New York, NY 10004, USA
www.engconfintl.org – info@engconfintl.org

Nong Nooch Pattaya Garden & Resort
34/1 Moo 7 Najomtien District
Sattahip, Pattaya, 20250
Thailand
Tel: +66-3823-8061-3
nongnoochresort@gmail.com

Engineering Conferences International (ECI) is a not-for-profit global engineering conferences program, originally established in 1962, that provides opportunities for the exploration of problems and issues of concern to engineers and scientists from many disciplines.

ECI BOARD MEMBERS

Barry C. Buckland, President
Mike Betenbaugh
Joye Bramble
Nick Clesceri
Peter Gray
Michael King
Raymond McCabe
Eugene Schaefer
P. Somasundaran

Chair of ECI Conferences Committee: Nick Clesceri

ECI Technical Liaison for this conference: Herbert Klapperich

ECI Executive Director: Barbara K. Hickernell

ECI Associate Director: Kevin M. Korpics

Previous conferences in this series

Use of Shotcrete for Underground Structural Support

July 15-20, 1973

South Berwick, Maine

Conference Chair:

J. R. Graham, Bureau of Reclamation

Shotcrete For Underground Support II

October 3-8, 1977

Easton, Maryland

Conference Chair:

J. A. Veltrop, Harza Engineering Co.

Shotcrete For Underground Support III

April 16-21, 1978

St. Anton, Austria

Conference Chair:

L.F. Piatnik, Walco Chemical Corporation

Shotcrete For Underground Support IV

September 5-11, 1982

Paipa, Colombia

Conference Chairs:

Elwyn King, P.B, Q+D

Alberto Murlando, Ingetec

Shotcrete For Underground Support V

June 3-7, 1990

Uppsala, Sweden

Conference Chairs:

John Sharp, Geo-Engineering

Elwyn King, Parsons Brinckerhoff

Tomas Franzen, Swedish Rock Research Foundation

Shotcrete For Underground Support VI

May 2-6, 1993

Niagara-on-the-Lake, Ontario

Conference Chairs:

D.F. Wood, University of Toronto

D. Morgan, Hardy BBT

Shotcrete For Underground Support VII

June 11-15, 1995

Seefeld, Austria

Conference Chairs:

H. Klapperich, DMT

R. Poettler, Kling

J. Willocq, Lafarge International

Previous conferences in this series

Shotcrete For Underground Support VIII

April 11-15, 1999

Sao Paulo, Brazil

Conference Chairs:

Tarcisio B. Celestino, Thermag & University of Sao Paulo, Brazil

Harvey Parker, Harvey Parker and Associates

Shotcrete For Underground Support IX

November 17-21, 2002

Shonan Village, Japan

Conference Chairs:

Koichi Ono, University of Kyoto

Rusty Morgan, AGRA Earth & Environment

Shotcrete For Underground Support X

September 12-16, 2006

Whistler, B.C., Canada

Conference Chairs:

Rusty Morgan, AMEC Earth & Environmental

Harvey Parker, Harvey Parker & Associates, Inc.

Shotcrete For Underground Support XI

June 7-10, 2009

Davos-Platz, Switzerland

Conference Chairs:

Felix Amberg, Amberg Group, Swiss Tunnelling Society

Knut F. Garshol, BASF Construction Chemicals, LLF

Shotcrete For Underground Support XII

October 11-13, 2015

Singapore

Conference Chair:

Ming Lu, Nanyang Technological University

Shotcrete For Underground Support XIII

September 3 - 6, 2017

Irsee, Germany

Conference Chairs:

Dietmar Mähner, FH Münster, Germany

Matthias Beisler, ILF Consulting Engineers, Thailand

Frank Heimbecher, FH Münster, Germany

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) |
| <p>08:30 - 10:30</p> <p>08:30 - 8:45</p> <p>08:45 – 09:15</p> <p>09:15 – 09:45</p> <p>9:45 - 10:15</p> <p>10:15 – 10:30</p> | <p>Technical Session</p> <p>Opening note (conference chair)</p> <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 ▪ Keynote Speaker 02: Prof. Marc Jolin, Laval University, Canada Pumping shotcrete: past knowledge applied for modern shotcrete mix design ▪ 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 <p>Questions & Answers</p> |
| 10:30 – 11:00 | Coffee break |
| <p>11:00 – 12:45</p> <p>11:00 – 11:30</p> <p>11:30 – 12:00</p> <p>12:00 – 12:30</p> <p>12:30 – 12:45</p> | <p>Technical Session</p> <ul style="list-style-type: none"> ▪ Technical Presentation 04: Dr. Michael Mett, Dibit Messtechnik GmbH 3D Tunnel Inspection with Photogrammetric and Hybrid Systems ▪ Technical Presentation 05: Prof. Dr. Junsheng Yang, Central South University, China Stability Analysis and Reinforcement of the Existing Karst Cave Passing through Yujingshan Tunnel ▪ Technical Presentation 06: Prof. Kyong-Ku Yun, Kangwon National University, South Korea Plastic Shrinkage Properties of Natural Fiber Reinforced Shotcrete <p>Questions & Answers</p> |
| 12:45 - 14:00 | Lunch (Restaurant Nong Nouch Garden) |
| <p>14:00 – 15:30</p> <p>14:00 – 14:30</p> <p>14:30 – 15:00</p> | <p>Technical Session:</p> <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 ▪ 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 |

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

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