

The logo for the 17th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering (17ARC). It features the number '17' in yellow and 'ARC' in blue, with a circular emblem to the right containing a globe and a compass. Above the text is a stylized map of Asia.

Asian Regional Conference on
Soil Mechanics and Geotechnical Engineering

17th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering 2023

Monday 14 August - Friday 18 August 2023

Hilton Astana Hotel, Astana, Kazakhstan



Professor **Askar Zhussupbekov**,
Chairman, Organizing Committee of 17ARC, 2023
President of Kazakhstan Geotechnical Society

Dear Colleagues and Friends,

It is my great pleasure to inform you that the 17th Asian Regional Conference on Geotechnical Engineering will take place on August 14-18 in 2023 at Hilton Astana Hotel, Astana, Kazakhstan. The main theme of the 17 ARC is Smart Geotechnics for Smart Societies. Several subjects on modern geotechnical technologies and activities will be covered at during time of this forum. The 17 ARC is organized by the Kazakhstan Geotechnical Society (ISSMGE).

As the Chairman of the 17 ARC Organizing Committee, I cordially welcome your participation and kind support in this important event in 2023, including technical programs, exhibition, social events and other available and new information of the conference website (www.17arc.org) we will update with new information in the near future.

A number of subjects in modern geotechnical technology and activities will be covered up to match the main theme. In a roll about of 60 years, we sincerely hope that the 17ARC will continue to bring great success following the glories of past ARCs (New Delhi 1960, Tokyo 1963, Haifa 1967, Bangkok 1971, Bangalore 1975, Singapore 1979, Haifa 1983, Kyoto 1987, Bangkok 1991, Beijing 1995, Seoul 1999, Singapore 2003, Kolkata 2007, Hong Kong 2011, Fukuoka 2015, Taipei 2019).

PUBLISHING

By agreement with the Publisher CRC Press / Balkema – Taylor & Francis Group the Conference Proceedings will be sent to multiple indexing services, including Elsevier (Scopus, Compendex and EI) and Clarivate Analytics, Formerly the IP & Science business of Thomson Reuters (Web of Science).

Contact us

Conference Secretariat info@17arc.org

Registration registration@17arc.org

Abstract Submission paper@17arc.org,

paper17arc.org@gmail.com

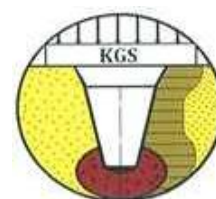
Official Congress Venue

Hilton Astana Hotel

Sauran St 46, Astana, Kazakhstan, 010000

ORGANISED BY

SIMSG ISSMGE



TOPICS

IMPORTANT DATES

- Soil characteristics and properties
- Underground space and deep excavations
- Tunneling
- Slope, debris flow and embankments
- Dams
- Shallow and deep foundations
- Soil dynamics and geotechnical earthquake engineering
- Soil improvement
- Geoenvironmental engineering
- Geotechnical reliability, risk assessment and management
- Geosynthetics and Geoproducts
- Engineering geology and rock engineering
- Forensic engineering
- Offshore and harbor geotechnics
- Geotechnical training and education
- In- situ testing and monitoring
- GeoEnergy
- Case History
- Investigation of foundations of historical structures, buildings and monuments
- Numerical analysis of soil-structure interaction
- Geotechnical Infrastructures
- Marine Geotechnics
- Mining and Geotechnics
- Design and Modeling
- Transportation Geotechnics, Engineering and Technology
- Piling foundations, technologies and testing
- Press-in piling technology
- Trenchless technology in underground constructions
- Pipelines on problematical soil ground
- Frost geotechnics
- BIM technology and geotechnical engineering
- Megaprojects and Megastructures on difficulty soil grounds
- Others

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Full Paper Submission Deadline

April 1st, 2023 (23:59 GMT+6)

Notification of Final Paper Acceptance

April 15th, 2023 (09:00-17:00 GMT+6)

Online Registration System Open

January 1st, 2023 (23:59 GMT+6)

Early Bird Registration Deadline

March 31st, 2023 (23:59 GMT+6)

Author Registration Deadline

April 15th, 2023 (23:59 GMT+6)

Online Registration Deadline

July 15th, 2023 (23:59 GMT+6)

17ARC Conference

August 14th – August 18th, 2023

GUIDELINES FOR PREPARATION OF PAPER

The **templates** for the Abstracts and Full Papers are available at <https://17arc.org/abstracts-papers/>

!!! To submit your Paper please register first at <https://17arc.org/registration/>

All text, figures, tables, etc. should fit exactly in the type area of 15 × 24 cm (5.91" × 9.52"). All text should be typed in Times New Roman. All text is 11 pt on 12 pt line spacing except for the paper title (16 pt on 18 pt), author(s) (12 pt on 13 pt), affiliation(s) (10 pt on 11 pt) and the small text in tables, captions and references (10 pt on 11 pt). All line spacing is exact. Never add a line space between lines or paragraphs. First lines of paragraphs are indented 4 mm (0.16") except for paragraphs after a heading or a blank line (First paragraph tag). Equations are indented 12 mm (0.47") (Formula tag).

The Full Paper should contain 4 or 6 pages

Each registered participant can be a co-author of **up to 3 ARTICLES** in the 17ARC

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Rashid Mangushev
Professor |Russia
Technological and Structural Methods of Construction of the Underground part of Unique Facilities in St. Petersburg Built During the Last 10 Years

Buddhima Indraratna
Professor |Australia
Undrained Instability and Fluidization of Soft Subgrade Soils under Cyclic Loading in Heavy Haul Railways

Ren-Peng Chen
Professor |China
Deformation of Shield Tunnels Induced by Adjacent Construction

Mitsu Okamura
Professor |Japan
Monitoring of Backward Erosion Piping in River Levees Using Distribution of Surface Settlement

Dr. J.S. Dhanya
Indian Geotechnical Society|India
Innovative Geotechnical Solution for Base Isolation

Dr. Thao Doan
University of Technology Sydney |Australia
Influence of microscale cohesive contacts on the clogging behaviour of soils-DEM study

Dr. Shahmov Zhanbolat
Kazakhstan Geotechnical Society |Kazakhstan
Temperature Effect to Soil Ground and Structures in Transportation Engineering

Bright Spark Lecturers



Dr. Lyesse Laloui
Professor |Switzerland
Energy Geostuctures: A New Era for Geotechnical Engineering Practice

Jong-Sub Lee
Professor |South Korea
Innovation in Dynamic In-Situ Testing

Dr. Hoe I. Ling
Professor |USA
Contributions of Physical and Constitutive Modelings, and Numerical Analysis to the Dynamic Behavior of Reinforced Soil Retaining Structures

Bagdat Teltayev
Professor |Kazakhstan
Temperature and Moisture Monitoring in Pavement and Subgrade in Kazakhstan

Dr. Victor Kaliakin
University of Delaware |USA
Behavior and modeling of silt-clay transition soils

Dr. Cholachat Rujikiatkamjorn
University of Technology Sydney |Australia
Application of Vertical Drains and Vacuum Preloading for Stabilising Soft Ground for Transport Infrastructure

Dr. Christos Tsatsanifos
Pangaea Consulting Engineers Ltd |Greece
Preservation and Restoration of Monuments: The Authenticity Principle in Geotechnical Interventions

Dr. Rasin Düzceer
Kakstas |Turkey
"Foundation Failures of Multi Storey Buildings in Turkey due to the Earthquake of February 6, 2023"

Thematic Lecturers

Special Lecturers

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Marc Ballouz
President ISSMGE |USA
Geotechnical Marriage of the Theory to Practice



Keh-Jian Shou
Vice-President of ISSMGE for Asia |Taiwan, Republic of China
On the Landslide Hazard and Resilience with the Impact of Climate Change in Taiwan



Waldemar Kwiatkowski
Construction Director Keller Central Asia LLP |Kazakhstan
Geotechnical Contributions in Central Asia: Practice and Lessons Learnt



Eun Chul Shin
Emeritus Professor |South Korea
Consolidation Problem of Dredged Fill Soil for Large-Scale Land Reclamation Project



Dr. Thomas Bauer
Honorary Professor |Germany
Drilled Shafts – Methods and Drilling Tools



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Director of Pumex Infotech Pvt Ltd. |India
Engineering challenges behind demolition of a high rise structure by delayed detonation techniques at Delhi, India

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Invited Lecturers



Mahdi Karkush
Professor |Iraq
Electrokinetic Enhancement of Microbial Induced Calcite Precipitation used in Improving the Shear Strength and Compressibility of Soft Clay



Fauziah Ahmad
Professor |Malaysia
Study of Slope Failure in two Region: A Comparative Study Between Penang Island Malaysia and North Sumatera Indonesia



Daniele Cazzuffi
AGI-IGS President
IGS Past President |Italy
Geomembrane Barrier Systems for Construction and Rehabilitation of Embankment Dams



Der-Wen Chang
Professor |Taiwan, Republic of China
Assessments of dimensionless pile stiffness for embedded piled raft foundations in soft clays under vertical loads



Dr. Helmut F. Schweiger
Professor |Austria
Numerical modelling of complex geotechnical problems - 3 Examples



Dr. Leung Chun Fai
Emeritus Professor |Singapore
Creep after Unloading



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TECHNICAL TOURS

Abu Dhabi Plaza is a 500,000m² mixed-use development in Astana, Kazakhstan comprising five towers joined by a four-storey podium and four-level basement. The centerpiece of the development is a 75-storey tower which, is the tallest building in the region and a landmark for Kazakhstan.

Construction of Astana LRT – Light Rail Transport – was launched back in 2011 and should have been completed by the end of 2024.

EXPO 2017 the world’s largest spherically-shaped building, measuring 100 m in height from plinth level and 80 m in diameter. Its total area is 24,000 sq. m.

Astana Grand Mosque is mosque in Astana, Kazakhstan. It is the largest mosque in Central Asia and one of the largest in the world.

The main dome of the mosque is the largest of its kind in the world. The height of the dome is almost 83.2 meters with a diameter of 62 meters.

The total capacity of the mosque is 235 thousand people, of which: 30 thousand men and 5 thousand women can pray in the halls at the same time

REGISTRATION FEES FOR PARTICIPANTS

	Early Bird	Regular	Onsite
ISSMGE Member	US\$ 450	US\$ 500	US\$ 550
Non-ISSMGE Member	US\$ 500	US\$ 550	US\$ 600
Student*	US\$ 200	US\$ 250	US\$ 300
Accompanying Person	US\$ 150	US\$ 200	US\$ 250
Gala Dinner	US\$ 100	US\$ 150	US\$ 200

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Standard booth 6m² “OCTANORM” (racks, girders, panels, frieze) floor size 2x3m, height 2.5m

(Price for 1 piece, with installation)

Standard (2m x 3m) = USD 3,000

1 table (80x80cm) and 2 chairs

Lighting

Electrical socket

The cost is \$3000 USD

for 14-16 August, 2023

