Invitation

On behalf of the Organizing Committee, we are pleased to invite you to attend the *GeoMEast 2017* International Conference to be held in *Sharm El-Sheikh, Egypt from July 15 to 19, 2017*. The *GeoMEast SERIES* is managed by *SSIGE* and supported by a number of leading international professional organizations.

Recent rapid construction in Middle East has provided great opportunities for bridge, pavement, geotechnical, and tunnel engineers to use their knowledge and talents to solve many challenging problems involving highways, bridge structures, pavements, materials, ground improvements, slopes, excavations, dams, canals and tunnels with innovative solutions and cutting-edge technologies.

GeoMEast 2017 will provide a showcase for recent developments and advancements in design, construction, and safety Inspections of transportation Infrastructures and offer a forum to discuss and debate future directions for the 21st century. Conference topics cover a broad array of contemporary issues for professionals involved in bridge, pavement, Geomechanics, geo-environmental, geotechnical, geosciences, geophysics, tunnel, water structures, railway and emerging techniques for safety inspections. You will have the opportunity to meet colleagues from all over the world for technical, scientific, and commercial discussions.

WELCOME TO EGYPT!

Egypt has one of the longest histories of any modern country, arising in the tenth millennium BCE as one of the world's first nation states. Considered a cradle of civilization, Ancient Egypt experienced some of the earliest developments of design and construction, writing, agriculture, urbanization, organized religion and central government in history. Iconic monuments such as the Giza Necropolis and its Great Sphinx, as well the ruins of Memphis, Thebes, Karnak, and the Valley of the Kings, reflect this legacy and remain a significant focus of archaeological study and popular interest worldwide.

Chairmen of GeoMEast 2017

Mohamed F. Shehata: Khalid M. El-Zahaby:President of SSIGE President of HBRC

Important Dates

January 15, 2016: Open for Abstract submission

April 30, 2016: Deadline for Abstract submission

June 15, 2016: Notify authors of accepted Abstracts

September 30, 2016: Deadline for Full Paper submission December 15, 2016: Notify authors of Accepted Papers

January 15, 2017: Opening of registration

February 15, 2017: Final Camera-Ready Papers

July 15~19, 2017: Conference

FIRST ANNOUNCEMENT

GeoMEast 2017 International Conference

"Sustainable Civil Infrastructures (SCI): Innovative Infrastructure Geotechnology"

July 15~19, 2017 • Sharm El-Sheikh, Egypt

Organizers

 The Egyptian Prime Minister: Ministry of Housing, Utilities and Urban Communities.





 The Egyptian Housing and Building Research Center (HBRC) & (Geo-Institute).





 The Soil-Structure Interaction Group in Egypt (SSIGE). (Director of GeoMEast)



 The Egyptian Tunneling Society (ETS) & International Tunneling Association (ITA)





General Secretariat

Hany Farouk Shehata: Hesham K. Ameen: CEO, SSIGE Chair of Geo-Inst., HBRC

Would you like to join the organizers or to be a sponsor or an exhibitor?

Email: <u>info@ssige.org;</u> <u>info@geomeast2017.com</u>

Website: www.GeoMEast2017.org

Affordable to all budgets, we still have a few slots open!

Confirmed Co-Sponsors

- > American Society of Civil Engineers (ASCE), USA
- Arab American Assoc. of Engineers and Architects
- Deep Foundation Institute, DFI, USA
- > ENTPE, Université de Lyon, France
- Federal Highway Administration, US DOT
- GeoChina Civil Infrastructure Assoc. (GCIA), USA
- ➤ Geo-Institute of ASCE (GI), USA
- Institution of Civil Engineers (ICE), UK
- Int'l Society of Soil Mechanics and Geotechnical Eng. (ISSMGE) – TC 202 Transportation Geotechnics
- ► International Code Council (ICC)
- International Society for Asphalt Pavements (ISAP)
- International Society for Concrete Pavements (ISCP)
- International Society for Structural Health Monitoring of Intelligent Infrastructure (ISHMII)
- ➤ International Union of Soil Sciences (IUSS)
- Memphis University, USA
- Shandong University, China
- Southern Plains Transportation Center (SPTC), USA
- The International Association for Engineering Geology and the environment (IAEG)
- Transportation and Development Institute, T&DI, USA
- > Transportation Research Board (TRB), USA
- University of Oklahoma (UO), USA





Institution of Civil Engineers CODE COUNCIL®



INTERNATIONAL



















Conference Themes

Geotechnical, Geological, Geoenvironmental and Geosynthetics:

- 1- Geotechnical, Geoenvironmental and Earthquake Geotechnical Engineering;
- Soil and Rock Mechanics, Geomechanics, Mining, and Geological engineering;
- 3- Geosynthetics and Reinforced Soil Retaining Structures
- 4- Behavior, Identification and In-situ Test Methods for Site Characterization of Soils, and Lateritic, Problematic, Collapsible, Swelling, Soft, Sabkha and Uncommon Soils;
- 5- Design and Quality Control of Earth Structures and Subgrades;
- Soil Stability and Landslide, Ground improvement and Seismic Hazards;
- 7- Soil-Structure Interaction, Advanced Analysis of Shallow and Deep Foundations, Foundation Failure and Repair, and MicroPiles and its innovative applications;
- 8- Computational Mechanics, Innovative Soil Models, Discrete Element and Boundary Element Modelling, Mesoscale Modeling, and Advanced Numerical and Analytical Analyses;
- 9- Physical Modelling in Geotechnics;
- 10- Saturated and Unsaturated Soil Mechanics;
- 11- Oil and Gas, and Petroleum Geotechnical Engineering; and
- 12- Geosciences, Geomatics, Geoinformatics, Geophysics and Global Hazards.

Sustainable Infrastructures:

- 13- Structures and Bridges Engineering: Advanced Analysis of Structures; Non-Destructive Evaluation; Inspection Technologies; Structural Health Monitoring; Remote Monitoring of Structures; Scour Assessment; Seismic Design Issues for Bridges, Super Structures and Underground Structures; Design Methods and Materials, Innovative Repair Methods and Materials, Durable and Sustainable Designs, Innovative Materials, Advances in Foundation Design/Construction, Accelerated and/or Performance Based Design/Construction, Aesthetics and Environment; State-of-the-Arts and State-of-the-Practices on Bridge Design, Construction and Maintenance; Special Foundation Treatment and Settlement Control Technology.
- 14- Tunneling Engineering: Tunnel Management and Inventory, Monitoring and Settlement Control; Emerging Technologies, Lining Design & Precast Segment Advances; Innovation in Tunneling Design, Construction, Repair, Rehabilitation; Fire & Life Safety, Vulnerability & Security; Tunneling in Soft Ground, Ground Conditioning and Modification; Advanced prediction technology of tunnel construction geology; Deep excavations and urban tunneling.
- 15- Pavement Engineering, Airports and Advances in Pavement Techniques: Airfield pavement analysis, rehabilitation and performance; Recycled Asphalt Pavement; Pavement Design, Modeling, Performance Evaluation, & Management; Sustainable Long Life Pavement; Ground Improvement, and Chemical/Mechanical Stabilization for Pavement and Geotechnical Applications; Moisture Damage in Asphaltic Concrete Materials; Pavement Foundations: Modelling, Design and Performance Evaluation; Geotechnical Properties and Their Effects on Portland Concrete Pavement Behavior and Performance; Warm Mix;

Rehabilitation strategy selection and preventative maintenance treatments; Accelerated Testing of Pavement Structures and Materials; Material, Design, Construction, Maintenance and Testing of Pavement; Asphalt Binder and Mixture Characterization; Construction and Rehabilitation of Jointed Concrete Pavement, Reinforced Concrete Pavement, and Continuously Reinforced Concrete Pavement; Bridges Deck Pavement; Stabilization, Recycling, Foamed Bitumen and Emulsion, Granular Materials; Roadway Widening; Asphalt Mix-Design, HMA; Testing &Material; Property Characterization.

- 16- Transportation Engineering; Highway Pavements: Design, Materials, and Construction; Transportation Operations and Safety; Advanced Technologies, Infrastructure Systems, Intermodal Transportation, Planning, and Development; Rail and Transit; Aviation.
- 17- Railroad and Railway Engineering; Railway and Railroad Track Substructure; High Speed Rail System; Seismic Design for Railway and Roadway Structures; Economics of Railway Engineering and Operations; Structures, Maintenance and Construction; Innovative Procedures and Precautions; Long Term Pavement Performance Contest; BIM and Contract Administration.
- 18- Dams Engineering, Canals and Levees, Irrigation and Water Sources and Structures, and Ports, Offshore and Marine Technologies.
- 19- Smarthome, barrier-free building and reconstructing Climate Change and effects on Infrastructure:
- 20- Sustainability and Energy Engineering;
- 21- Environmental and Waste / Sediment Management,
 Characterization, Treatment and Re-Use;
- 22- Energy Geotechnics and Geo-Energy Infrastructure.
- 23- Materials Engineering, Nanotechnologies, Advances in Composite Materials, Climate-Friendly Technologies, and Damage Mechanics.
- 24- Structural Health Monitoring, and Sustainable Construction Technologies;
- 25- Advanced Analysis for Sustainable Design.
- 26- Worldwide innovative procedures and precautions for the Design;
- 27- Building Information Modeling (BIM), Building and Construction Engineering, Project Management, and Contract Administration; and
- 28- Sustainable Infrastructure: Current and Projected; Financing Infrastructure Projects; Cross-cutting Issues; Materials, Tools, and Methodologies; Innovation; Sustainability and Competitiveness; Risk, Resiliency, and Adaptation to Climate Change; Sustainable Cities; Sustainability, Society and Culture; Envision™ and Other Rating Systems; Special Topics on Middle East Urbanization.



Conference Publication:

➤ Accepted English papers will be published in:

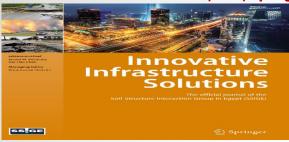
Springer Conference Proceedings



Which will be submitted for inclusion in EI, ISI-WoS, SCOPUS, Springer Link, and Google Scholar.

> Selected papers will be considered for publication as special issues in some prestigious journals, Include:

Innovative Infrastructure Solutions, *IISS*, Springer



Subjected to a full peer review process as set forth by the journals' Editors.

➤ Simultaneous translation may be provided during the conference in Arabic, English and French.

Publication Steering Committee

Hany Farouk Shehata: CEO, SSIGE, Egypt (Chair) Imad L. Al-Qadi: University of Illinois, USA (Co-Chair) Nabil Khélifi: Springer, Germany (Co-Chair)

Wissem Frikha: ENIT, Tunisia (Co-Chair)

Abdullah Galaa: HBRC, Egypt

Antonio Viana da Fonseca: University of Porto, Portugal

Dar-Hao Chen: TXDOT, USA

Dharamveer Singh: Indian Inst. of Tech., Bombay, India Gabriele Tebaldi: Univ. of Parma, Italy: President of ISAP Hugo Rodrigues: Polytechnic Inst. of Leiria, Portugal João Pombo: Heriot-Watt University, Edinburgh, UK

John Kaiser Calautit, University of Sheffield, UK

Khalid El-Zahaby: HBRC, Egypt

Sherif W. Agaiby: Dar Al-Handasah, Egypt Tamer M. Sorour: Ain-Shams University, Egypt

Tarek Abdoun: RPI, USA

Steering Committee

Khalid M. El Zahaby (EG), Chair Mohamed F. Shehata (EG), Chair Hany F. Shehata (EG), Vice-Chair Nabil Khélifi (DE), Vice-Chair Wissem Frikha (TN), Vice-Chair Dar-Hao Chen (US), Co-Chair Imad L. Al-Qadi (US), Co-Chair Tarek H. Abdoun (US), Co-Chair Braja Das (US), Advisory Chair Harry G. Poulos (AU), Advisory Chair Musharraf Zaman (US), Advisory Chair

Conference Advisory Committee

Imad L. Al-Qadi: University of Illinois, USA (Chair) Braja Das: Dean Emeritus, CSU, USA (Co-Chair) Musharraf Zaman, Univ of Oklahoma, USA (Co-Chair) Sherif W. Agaiby: Dar Al-Handasah (Co-Chair)

Adil K. Al-Tamimi: American Univ of Sharjah, UAE Adrian Rodriguez-Marek: Virginia Polytechnic Inst, USA Alaa K. Ashmawy: American University in Dubai, UAE Ali Bouafia: Saad Dahlab University, Blida, Algeria Anand J. Puppala: University of Texas, Arlington, USA

Antonio Bobet: Purdue University, USA

António Gomes Correia: University of Minho, Portugal Antonio Viana da Fonseca: Chairman of TC 102 ISSMGE

Ather Ashraf: University of the Punjab, Pakistan

Atilla Ansal: President of the Europe Assoc. for EQ Eng.

Bin Shi: Nanjing University, China

Chan Chee-Ming: Univ Tun Hussein Onn, Malaysia

Dar-Hao Chen: TXDOT, USA

David Yánez Santillán: SMIG, Mexico Debra Laefer: Univ College Dublin, Ireland Erol Güler: Boğaziçi University, Turkey Erol Tutumluer: University of Illinois, USA Fadi Hage Chehade: Lebanese University, Lebanon G. Hemalatha: Karunya Inst. of Tech. and Sci., India Hany Fekry: Delaware Dept. of Transportation, USA

Jacob Hiller: MTU, USA

Jay N. Meegoda: New Jersey Institute of Tech., USA Jeffery R. Roesler: University of Illinois, USA

Jian Liu: Shandong University, China

Jia-Ruey Chang: National Ilan University, Taiwan João Pombo: Heriot-Watt University, Edinburgh, UK John Kaiser Calautit, University of Sheffield, UK

Krishna R. Reddy: University of Illinois, USA

Louay N. Mohammad: LSU, USA

Marc Ballouz: Int'l Instit for Geotechnical & Materials

Marwan Al Heib: INERIS, France

Muhannad T. Suleiman: Lehigh University, USA Murad Abu-Farsakh: Louisiana State University, USA

Neeraj Buch: MSU, USA

Rainer Horn: Christian Albrechts Univ. zu Kiel, Germany

Ramzi Taha: Qatar University, Qatar Serge Varaksin: Chairman TC 211 ISSMGE

Wolfgang Habel: BAM, Berlin, Germany: Pres. of ISHMII

Zoubeir Lafhaj: École Centrale de Lille, FR

Conference Technical Committee

Khalid M. El-Zahaby: President of HBRC, EG (Chair)

Mounir Bouassida: ENIT, TN (Co-Chair) Tarek Abdoun: RPI, USA (Co-Chair) Wissem Frikha: ENIT, TN (Co-Chair) Wong K. Kwan: ENTPE, FR (Co-Chair)

Abejide, O. S: Ahmadu Bello University, Nigeria Adel Abdelnaby: The University of Memphis, USA Ali Karrech: University of Western Australia, Australia

Amin Almasri: Jordan University, Jordan

Amir Hossein Hamidian: University of Tehran, Iran

Antonin Fabbri: Univ of Lyon/ENTPE, FR

Audrey Copeland: NAPA, USA Babak Hamidi: GFWA, Australia

Belgasem Jellai: Univ. de Tunis El Manar, Tunisia

Celso Romanel: PUC-Rio, Brazil Chu Jian: NTU, Singapore

David Jones: University of California, Davis, USA Deesy G. Pinto: University of Coimbra, Portugal

Dharamveer Singh: Indian Inst. of Tech., Bombay, India

Emilio G. Taengua: Queen's University, UK

Essaieb Hamdi: National Engineering School, Tunis Hassam N. Chaudhry: Heriot-Watt Univ-UK, UAE

Herve DI Benedetto: Univ of Lyon/ENTPE, France Hesham Kamal Ameen: Geo-Institute of HBRC, Egypt

Imen Said: ENIT, Tunisia

Jize Yan: University of Cambridge, UK

Joseph K. Oddei: Ghana Geotechnical Society, Ghana

K. Guerrier: Université Quisqueya, Haiti

K. Muthukkumaran: NIT, Tiruchirappalli, India Khalid Alshibli: University of Tennessee, USA

Lajos Kisgyörgy: Budapest Univ of Tech., Hungary Lamia T. Bouebdellah: University of El-Manar, Tunisia

Manfred N. Partl: Carleton University, Switzerland

Marwa Hassan: Louisiana State University, USA Mohamed F. Shehata: EHE-Consult Group, EG, UAE

Nadia Mokni: IRS[N], France

Nadia Shnouda: Geo-Institute of HBRC, Egypt

Neelima Satyam: Inst. of Inf. Tech., Hyderabad, India Osman M. O. Ramadan: Cairo University, Egypt

Ossama Abd-Elrahman: RPI, USA

P. Anbazhagan: IIS, Bangalore, India

Pijush Samui: VIT University, Vellore, India Pingbo Tang: Arizona State University, USA Roberto Valentino: University of Parma, Italy

Sami Montassar: University of Tunis El Manar, Tunisia

Sarat Kumar Das: IIT Kanpur, India

Sayed M. A. El-Araby: Ain-Shams University, Egypt Shehata E. Abdel Raheem: Taibah University, SA

Sherif Elfass: University of Nevada, USA Suzan Usama: Geo-Institute of HBRC, Egypt Tamer M. Sorour: Ain-Shams University, Egypt

Tatsuya Ishikawa: Hokkaido University, Sapporo, Japan

Waleed E. El-Sekelly: RPI, USA

Y. Richard Kim: North Carolina State University, USA Youssam Kazan: Lebanese University, Beyrouth, Lebanon

Local Organizing Committee

Mohamed Farouk Shehata: President of SSIGE (Chair)

Khalid Yousry: VP of HBRC (Co-Chair)

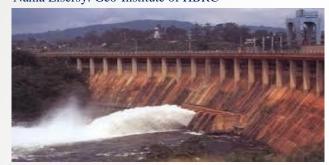
Nasser Abdel-Ghafour: VP of HBRC (Co-Chair)

Tamer M. Sorour: SSIGE (Co-Chair)

Youssef F. Rashed: The Supreme Council of Egyptian **Universities (Co-Chair)**

Abdullah Galaa: Geo-Institute of HBRC

Hany F. Shehata: CEO, SSIGE M.E. Abdelsalam: President of ETS Nahla Elsersy: Geo-Institute of HBRC



Higher Dam, Egypt (Since 1960)



Spans, Egypt (Since 1840)

"Sinai" Technical & Social Tours:



Colored Canyon, Sinai

It is a rock formation on Sinai Peninsula. It is a labyrinth of rocks, some of them have about 40 meters. The canyon is almost 800 meters long. All sorts of creative rock formations can be seen around the Canyon.



New Suez Canal (Original, 1860), near to Sinai

The Suez Canal is an artificial waterway in Egypt extending from Port Said to Suez and connecting the Mediterranean Sea with the Red Sea. It is one of the world's most important waterways.



Saint Catherine's Monastery (548), Sinai

The monastery is one of the oldest working Christian monasteries in the world located in Sinai. The site contains the world's oldest continually operating library, possessing many unique books including the Syriac Sinaiticus and, until 1859, the Codex Sinaiticus.

"Cairo" Technical & Social Tours:



Pyramids (BC), Giza (close to Cairo)

The Great Pyramid of Giza is one of the Seven Wonders of the Ancient World. The base is over 52,600 square meters in area with a stress more than (1100 kPa). It is the oldest green building in the world!



Cairo Tower (Since 1956), Cairo

It is a free-standing concrete tower located in Cairo, Egypt. At 187 m, it has been the tallest structure in Egypt and North Africa about 50 years. It was the tallest structure in Africa for 10 years.



The Egyptian Museum (1902), Cairo

The Egyptian Museum in Cairo contains the world's most extensive collection of Pharaonic antiquities; no visit to Egypt is complete without this trip

Venue:





Sharm El-Sheikh "City of Peace"



Diving at Sharm El-Sheikh