



DFI 2021 Middle East Conference

Geotechnical
Engineering For
Delivering Sustainable,
Cost-Effective Projects

16-18 February 2021



An Online Conference

CONFERENCE PROGRAM AND SCHEDULE*

All times shown in local Dubai time

Tuesday, 16 February 2021

1:00 PM - 1:15 PM

WELCOME AND OPENING

1:15 PM - 2:00 PM

Keynote: Sustainable Foundation of High-Rise Buildings in Soft Soil - Requirements and Recommendations for Technical Solutions
Rolf Katzenbach, Ph.D. | *Technical University at Darmstadt* | Germany

2:00 PM - 3:00 PM

TECHNICAL SESSION I: DEEP FOUNDATION PILING

Moderator: Hadi Koloot | Jacobs

2:00 PM - 2:20 PM

Micropiles for Emergency Repair of Bridges: Case Study

Mohab Hussein, P.E. | *New Jersey Department of Transportation (NJDOT)* | United States

2:20 PM - 2:40 PM

On the Use of the Micropiled Post-Tensioned Raft Foundation System in GCC Coastal Areas

Hamzah Al-Hashemi, M.Sc. | *Strong Force-MGC W.L.L.* | Bahrain

2:40 PM - 3:00 PM

Liquefaction Induced Downdrag on Full-scale Micropile Foundation During Blast-Induced Liquefaction

Kyle Rollins, Ph.D. | *Brigham Young University* | United States

3:00 PM - 3:15 PM

BREAK

3:15 PM - 4:35 PM

TECHNICAL SESSION II: EFFECTIVE AND SUSTAINABLE DESIGN

Moderator: Bukki Balogun | Arcadis

3:15 PM - 3:35 PM

Investigation of an Instrumented Deep Tieback-Nailed Hybrid Excavation in Tehran Alluviums

AliAkbar Dibaei, M.Sc Civil Engineering (Geotechnical Engineering) | *Amirkabir University of Technology* | Iran

3:35 PM - 3:55 PM

Load Settlement Behavior of Bored Piles of a Skyscraper in Dubai- A Case Study

Ahmed Al-Mufti, Ph.D., P.Eng. | *Rocscience Inc.* | Canada

*program is subject to change

3:55 PM - 4:15 PM **Sustainable Aspects of Rigid Inclusions as Soil Improvement Technique**
Mohamed Ayeldeen, Ph.D. | *Keller Grundbau GmbH* | United Arab Emirates

4:15 PM - 4:35 PM **An Overview of Energy Geostructures and the Associated Challenges in the Middle East Region**
Ahmed Badr Mabrouk, Ph.D., P.Eng | *American University in Dubai* | United Arab Emirates

4:35 PM - 5:05 PM **Invited Speaker - Incorporating Deep Foundations in Limit-Equilibrium Slope Stability Analyses: Revisiting Fundamentals and Seismic Applications**
Ben Turner, Ph.D., P.E. | *Dan Brown and Associates, PC* | United States

5:05 PM - 5:15 PM **CLOSING**

Wednesday, 17 February 2021

1:00 PM - 1:15 PM **WELCOME AND OPENING**

1:15 PM - 2:00 PM **Keynote: TBD**

2:00 PM - 3:00 PM **TECHNICAL SESSION III: GROUND IMPROVEMENT**
Moderator: Karim Khalaf | Fugro

2:00 PM - 2:20 PM **Dynamic Compaction for the Improvement of Loose Fills and In-Situ Soils in the GCC**
Salvatore Miranda, P.E | *Trevi SpA* | Italy

2:20 PM - 2:40 PM **Controlled Modulus Columns (CMC) Piloting in Saudi Arabia for Treating Loose Soils under Flexible Storage Tanks Formations**
Emmanouil Spyropoulos, Ph.D. | *Saudi Aramco* | Saudi Arabia

2:40 PM - 3:00 PM **Numerical Simulation of Jacked Pile Installation in Sand**
Balu George, Ph.D. | *M.A. College of Engineering* | India

3:00 PM - 3:15 PM **BREAK**

3:15 PM - 4:35 PM **TECHNICAL SESSION IV: DEEP MIXING AND QC/QA FOR GROUTED ELEMENTS**
Moderator: Mohamed Ayeldeen, Ph.D., C.Eng. | Jacobs

3:15 PM - 3:35 PM **Minimizing the Detrimental Role of Clays in Deep-Mixing with Chemical Additives**
Giovanni Spagnoli, PhD, MBA | *MBCC Group* | Germany

3:35 PM - 3:55 PM	Single Column Mixing Applications and References Around the World Franz-Werner Gerressen, Dipl. Ing. <i>BAUER Maschinen GmbH</i> Germany
3:55 PM - 4:15 PM	Corrosion Protection of Subsurface Installed Reinforcement by Cement Grout: Opportunities & Limitations Yasir Husain, MS <i>Ischebeck Titan Middle East</i> United Arab Emirates
4:15 PM - 4:35 PM	Thermal Integrity Testing Hazem Sarhan, Ph.D., P.E. <i>PDI, ADEC Engineering</i> United Arab Emirates
4:35 PM - 5:05 PM	Invited Speaker - Using Thermal Integrity Profiling (TIP) to Monitor Shaft Cooling System for Large Diameter Drilled Shafts David Schoen, P.E. <i>S&ME, Inc.</i> United States
5:05 PM - 5:15 PM	CLOSING
Thursday, 18 February 2021	
1:00 PM - 5:15 PM	STUDENT PROGRAM TO BE DEFINED