

**INTERNATIONAL CONFERENCE ON  
GEOTECHNICAL ENGINEERING  
November 5-6, 2010, Lahore (Pakistan)**

**INTRODUCTION TO PGES**

Pakistan Geotechnical Engineering Society was instituted in 1973, by a group of geotechnical engineers/geologists representing various public and private sector organizations of Pakistan. The platform was developed to promote the awareness of the Geotechnical Engineering in the engineering environment of Pakistan. The society has contributed to enhance the local expertise in the field of geotechnical engineering, by disseminating geotechnical knowledge through organizing technical lectures, conferences, site visits etc. The society aims to enhance the geotechnical knowledge-base in the field of geotechnical engineering, to groom good professionals for the country. PGES is affiliated with the International Society for Soil Mechanics & Geotechnical Engineering (ISSMGE). This society is actively engaged in the promotion of geotechnical engineering in Pakistan and has been successful in getting the Pakistani engineers and geologists recognized, internationally. So far, the society has successfully organized nine National Conferences. As a result, its members are regularly invited to deliver lectures, act as expert panelists during the Conferences of the ISSMGE and are members of the Technical Committees of ISSMGE.

**MESSAGE FROM MR. AMJAD AGHA, PRESIDENT PGES**

It is a matter of great honour and pride for me to announce the holding of International Conference on Geotechnical Engineering on November 5-6, 2010 in Lahore Pakistan under auspices of Pakistan Geotechnical Engineering Society (PGES). I am glad to see that PGES formed back in 1973, has matured into a dynamic technical society in its 37 years of practice. During this period, the Executive Council of PGES and its members worked really hard to promote and flourish the profession of Geotechnical Engineering in Pakistan and PGES is also well recognized internationally.

It is my privilege to welcome Ms. Rukhsana Zuberi, Chairperson Pakistan Engineering Council as our Chief Guest. I also welcome notable celebrities including Dr. Johann Golser, Dr. Peter Mason and Prof. Dr. Ikuo Towhata. I am also thankful to the staff of NESPAK, UET Lahore and ACE for joining hands together to make this event a big success. My special thanks to Lt. Gen. Muhammad Akram, Vice Chancellor UET Lahore for giving us this opportunity to hold this Conference at UET Campus. In the end, my special thanks are due to all our donors and sponsors who have helped us to bring forth this mega event.

**PREAMBLE**

The Pakistan Geotechnical Engineering Society (PGES) in collaboration with National Engineering Services Pakistan (NESPAK), University of Engineering & Technology (UET) Lahore and Associated Consulting Engineers (ACE), takes pleasure in announcing an International Conference on Geotechnical Engineering. The Conference will be held in Lahore, Pakistan on November 5-6, 2010. Ms. Rukhsana Zuberi, Chairperson Pakistan Engineering Council, will grace the occasion as the Chief Guest.

The Conference will be attended by a good number of renowned professionals from Pakistan and abroad. This will result in immense knowledge sharing between the professionals from client's bodies, consulting engineers, contractors, equipment suppliers etc.

During this Conference, keynote lectures will be presented by the renowned international geotechnical professionals, viz. Dr. Johann Golser (GEOCONSULT ZT GmbH/GEOCONSULT Consulting Engineers), Austria, Dr. Peter J. Mason (Int'l Dams and Hydropower) and Dr. Ikuo Towhata (University of Tokoyo, Japan). Dr. Golser will discuss 'Risk Management in Geotechnical Engineering', in his lecture. Similarly, 'Quantitative Risk Assessment in Dam Safety Practice', will be delivered by Dr. Mason. Prof. Towhata will deliver a talk on 'Effects of Weathering on Strength and Deformation Characteristics of Soft Rocks'.

A number of quality papers will be presented by renowned geotechnical professionals on November 5-6, 2010. These papers will cover diverse areas like Investigations, Testing, Design, Ground Improvement, Numerical Modeling, Case Histories etc. The Conference will help bring together the vast knowledge of the experts in this field, for future guidance.

A site-seeing tour of the selected historical places in Lahore is also planned (on payment) on November 6, 2010 after lunch.

**CONFERENCE LOCATION**

The Conference shall be held in the Seminar Hall, Chemical Engineering Department of University of Engineering & Technology, Lahore located at GT Road, Lahore.

**EXHIBITION**

An Exhibition to display the recent developments in geotechnical engineering has also been arranged in the vicinity of Seminar Hall. Various contractors, consultants and manufacturers are invited to display their expertise, equipment, etc.

**PROGRAMME**

The programme of the Conference consists of an Inaugural Session followed by three Technical Sessions on 5<sup>th</sup> November and two Technical Sessions on 6<sup>th</sup> November. A site visit has also been organized on 6<sup>th</sup> November. Detailed program of the Conference is as given below:

**November 5, 2010**

0800	0855	Registration	
<b>INAUGURAL SESSION</b>			
0855	0900	Recitation from Holy Quran	
0900	0910	Welcome Address	<i>By Vice Chancellor, UET Lahore</i>
0910	0925	Opening Address	<i>By Mr. Amjad Agha, President PGES</i>
0925	0945	Address by Chief Guest	<i>By Ms. Rukhsana Zuberi, Chairperson PEC</i>
0945	1005	Address by Chairman ICGE-2010 Organizing Committee	<i>By Dr. Tahir Hayat</i>
1005	1020	Distribution of Shields to Guests	
1020	1030	Group Photograph	
1030	1100	Coffee/Tea	<i>(Courtesy: M/S NESPAK)</i>

<b>TECHNICAL SESSION I (INVESTIGATIONS, STUDIES &amp; TESTING)</b>			
<b>Session Chairman: Engr. Karamat Ullah Ch., (Ex M.D. NESPAK Pvt. Ltd.)</b>			
<b>Session Co-Chairman: Dr. Nasir Ahmed, (Director, Institute of Geology, PU, Lahore)</b>			
1100	1130	Invited Lecture 1	<i>By Prof. Ikuo Towhata</i>
1130	1145	In Situ Stress Tests at Diamer Basha Dam Project	<i>By Izzar ul Haq &amp; Syed Tanveer Abbass</i>
1145	1200	Development of Meso-scale Odometer Test System	<i>By Shahid Azam</i>
1200	1215	Estimating Hydraulic Conductivity of Compacted Bentonites	<i>By Muhammad Ibrar Khan, Snehasis Tripathy &amp; Tom Schanz</i>
1215	1230	Experimental Study on Relative Compaction and Relative Density of Sandy Soils	<i>By Hassan Mujtaba Shahzad &amp; Khalid Farooq</i>
1230	1245	Characteristics of Deformation Field during Indentation of Reinforced Soil	<i>By Mazhar I. Arshad &amp; Zeeshan Wali</i>
1245	1300	Discussion	
1300	1305	Concluding Remarks by Session Chairman	
1305	1310	Distribution of Shields/Certificates to Authors	
1310	1430	Lunch	<i>(Courtesy: M/S NESPAK)</i>
<b>TECHNICAL SESSION II (INVESTIGATIONS, STUDIES &amp; TESTING)</b>			
<b>Session Chairman: Engr. Shams Ul Mulk (Ex Chairman, WAPDA)</b>			
<b>Session Co-Chairman: Dr. M. Asif Khan, (Director, National Centre of Excellence in Geology, University of Peshawar)</b>			
1430	1445	Development and Applications of Akbar Pressuremeter	<i>By Aziz Akbar, Zia ur Rehman, B. G. Clarke &amp; P. G. Allen</i>
1445	1500	Geotechnical Evaluation of Seepage Remedial Measures at Khanpur Dam	<i>By S. Muhammad Jamil, Nawab Ali, M. Salik Javaid &amp; Sarfaraz Ali</i>
1500	1515	The Effect of Changing the Geometry and Compaction Degree on Arching of Earth Dams	<i>By Mehdi M.Rezaei &amp; B. Salehi</i>
1515	1530	Resistivity Signature of Freshwater at Manageable Depth near Jhang, Pakistan	<i>By Asmat Ullah &amp; Khurshaid Alam</i>
1530	1550	Discussion	
1550	1555	Concluding Remarks by Session Chairman	
1555	1600	Distribution of Shields/Certificates to Authors	
1600	1615	Coffee/Tea	
<b>TECHNICAL SESSION III (ANALYTICAL/DESIGN TECHNIQUES)</b>			
<b>Session Chairman: Engr. Abdul Khaliq Khan, (Ex G.M. WAPDA)</b>			
<b>Session Co-Chairman: Dr. Ahmed Saeed Sheikh, (Prof. of Civil Engineering, UET Lahore)</b>			
1615	1630	A Comparative Study of Pile-Anchor Support System Design Methods for a Deep Excavation in Lahore	<i>By Sohail Kibria, Sadaf Saeed &amp; Aziz Akbar</i>
1630	1645	Methods for Estimating Internal Erosion in Embankment Dams	<i>By Azam Raza Khan, E.U.Khan, A.B. Nasir &amp; H. Khabbaz</i>

1645	1700	Comparison of Rock Mass Classification Systems for Diamer Basha Dam Project Site	<i>By Khawar Munir &amp; Khalid Farooq</i>
1700	1715	Discussion	
1715	1720	Concluding Remarks by Session Chairman	
1720	1730	Distribution of Shields/Certificates to Authors	

#### November 6, 2010

<b>TECHNICAL SESSION IV (ANALYTICAL/DESIGN TECHNIQUES)</b>			
<b>Session Chairman: Engr. Raghieb Abbas Shah, (Member Water, WAPDA)</b>			
<b>Session Co-Chairman: Brig. Dr. Nasrullah Abeer, (Advisor, FWO)</b>			
0845	0850	Recitation from Holy Quran	
0850	0915	Invited Lecture 2	<i>By Dr. Johann Golser</i>
0915	0930	Back-Analysis Procedure for Landslides	<i>By Manzoor Hussain, Timothy D. Stark &amp; Kamran Akhtar</i>
0930	0945	Geotechnical Zoning of Lahore for Foundation Design based on SPT data	<i>By Khalid Farooq, Kashif Imtiaz &amp; Sohail Kibria</i>
0945	1000	A Comparison of Analytical Methods for the Diaphragm Wall Behavior in Bangkok Soil	<i>By Muhammad Humza, Z. Z. Aye &amp; N. Thasnanipan</i>
1000	1015	Safe Bearing Capacity Evaluation for the Construction of Proposed Chaudhry Tahir Plaza, Lehrar Road, Islamabad	<i>By Tayyaba Mateen &amp; Aqeel Goher</i>
1015	1030	Discussion	
1030	1035	Concluding Remarks by Session Chairman	
1035	1045	Distribution of Shields/Certificates to Authors	
1040	1100	Coffee/Tea	
<b>TECHNICAL SESSION V (CONSTRUCTION/PERFORMANCE/MONITORING/CASE HISTORIES)</b>			
<b>Session Chairman: Engr. Amjad Agha, (President, ACE)</b>			
<b>Session Co-Chairman: Dr. Izzar ul Haq (G.M. WAPDA)</b>			
1100	1130	Invited Lecture 3	<i>By Dr. Peter J. Mason,</i>
1130	1145	Islam Barrage Reinforcement Structure Scanning By Ground Penetrating Radar (GPR)	<i>By Asmat Ullah, Muhammad Saeed &amp; Muhammad Atif</i>
1145	1200	Mechanical Behavior of Cement Treated Sand	<i>By Khawaja Adeel Tariq</i>
1200	1215	Swelling Pressures and Hydraulic Conductivities of Compacted Bentonites: An Experimental Investigation	<i>By Tom Schanz, Muhammad Ibrar Khan &amp; Snehasis Tripathy</i>
1215	1230	How the Overstressed Aquifer under Lahore Region Looks Through the Eyes of Geophysics and Its Implications towards Quantity and Quality of Water	<i>By Asmat Ullah, Muhammad Saeed &amp; Muhammad Atif</i>
1230	1245	Discussion	
1245	1250	Concluding Remarks by Session Chairman	
1250	1310	Distribution of Shields/Certificates to Authors/Organizing Committee/Sponsors	
1310	1400	Lunch	<i>(Courtesy: M/S ACE)</i>

1400	1730	Site Visit of Historical Places of Lahore. (For Details check with the Reception Desk at the Conference Venue)
------	------	--

### PAPERS NOT TO BE PRESENTED BUT INCLUDED IN PROCEEDINGS

1	G. Mesri, A. Q. Khan	USA	Interpretation of Vacuum Preloading using ILLICON Methodology
2	Wolfram Kagerer	Germany	New Austrian Tunneling Method – Not a Formula
3	Ancuta Rotaru	Romania	Landslides in Romania
4	M. Khodaparast	Iran	The Repeatability in Results of Mackintosh Probe Test in Soft Soils
5	M. Khodaparast	Iran	The improvements of Coastal Soft Clay using Preloading- Case Study
6	T.P.Thaker, K.S.Rao, K.K.Gupta	India	Use of Multi Channel Analysis of Surface Wave (MASW) Technique for the Development of Average Shear Wave Velocity (Vs30) Model: A Case Study of Surat City, Gujarat, India
7	Fawad S. Niazi, Paul W. Mayne, and David J. Woeller	USA	Review of CPT-Based Methods for Response Evaluation of Driven Piles in Dense Sands
8	Ali Bouafia	Algeria	P-Y Curves for Single Piles In Sand From The In-Situ Tests

### SPECIAL SUBSIDIZED RATES FOR HOTEL ACCOMMODATION

Sr. No.	Hotel Name	Rate/Night (Normal Room)		Rate/Night (Executive Room)	
		Single (Rs.)	Double (Rs.)	Single (Rs.)	Double (Rs.)
1	Avari	7500+tax	8500+tax	10000+tax	12000+tax
2	Pearl Continental	6500+tax	8500+tax	9400+tax	11500+tax
3	Holiday Inn.	6000+tax	7000+tax	9000+tax	10000+tax
4	Hotel Sunfort	5500+tax	6000+tax	7000+tax	8000+tax
5	Park Plaza	5500+tax	6500+tax	7000+tax	8000+tax
6	Best Western	3000+tax	4000+tax	4500+tax	5500+tax
7	Hotel One	3000+tax	3500+tax	4000+tax	4500+tax

**Note:** Those delegates, who would like to avail facility of booking at the above hotels at the special subsidized rates, may contact, Mr. Tanvir Shaukat, Principal Staff Officer, NESPAK Tel: 0924299231931, Cell: 0923009478494, Fax: 0924299231932

**The payment for the hotel room will have to be made in cash or by credit card while checking in.**

### PGES EXECUTIVE COUNCIL

**President:** Engr. Amjad Agha  
**Vice Presidents:** Engr. Abdul Khaliq Khan  
Prof. Ahmad Saeed Sheikh  
**Secretary General:** Engr. Dr. Tahir Masood  
**Finance Secretary:** Engr. Irfan Saeed  
**Members:** Dr. Izhar ul Haq  
Dr. Tahir M. Hayat  
Engr. Sohail Kibria  
Prof. Dr. Aziz Akbar  
Mr. Mian Mansoor Ahmed  
Mr. Muhammad Ilyas  
Prof. Dr. Syed Nazir Ahmed  
Mr. Jamshed Danish  
Prof. M.S. Qureshi  
Prof. Dr. Khalid Farooq

### CONFERENCE ORGANIZING COMMITTEE

<b>Chairman:</b>	<b>Contact No.</b>
Dr. Tahir M. Hayat	+92-321-4392990
<b>Secretary:</b>	
Engr. Hamid Masood	+92-333-4371808
<b>Coordinator:</b>	
Engr. Arooj M. Rana	+92-42-99090442
<b>Members:</b>	
Dr. Izhar-ul-haq	+92-300-8478339
Engr. Sohail Kibria	+92-336-4121426
Dr. Tahir Masood	+92-300-4000780
Prof. Dr. Nazir Ahmed	+92-21-4988000-2
Prof. Dr. Aziz Akbar	+92-300-4367709
Prof. Dr. Khalid Farooq	+92-300-4768167
Engr. Jamshed Danish	+92-300-8232713
Dr. Mubasher Aziz	+92-321-4086094
Engr. Khawar Munir	+92-333-4583728
Engr. Nasir Khurshid	+92-333-4603686
Engr. Rabia Arooj	+92-42-99090442
Engr. Junaid Ahmed	+92-42-99090377

## CONFERENCE SPONSORS

1. National Engineering Services Pakistan (Pvt.) Ltd., Lahore
2. University of Engineering & Technology, Lahore
3. Associated Consulting Engineers, Lahore
4. Frontier Works Organization, Rawalpindi
5. Sarwar & Company (Pvt.) Ltd., Islamabad
6. AJK Enterprises, Islamabad
7. High Technology Engineering Company, Rawalpindi
8. DEL (Pvt.) Ltd., Lahore
9. National Scientific Corporation (Pvt.) Ltd., Lahore
10. German Water & Energy Pakistan (Pvt.) Ltd., Lahore
11. Soil and Foundation Engineering Services, Lahore
12. Consolidated Engineering Services (Pvt.) Ltd., Karachi
13. Berkeley Associates, Lahore
14. Geo Consult Associates, Lahore
15. Geo Research, Lahore
16. Condrill (Pvt.) Ltd., Lahore
17. Geoscience Associates, Lahore
18. Pearlite Company, Lahore
19. International Trading Corporation, Rawalpindi

# INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING

LAHORE, PAKISTAN

NOVEMBER 5 - 6, 2010

**FINAL BULLETIN**



**Pakistan Geotechnical Engineering Society (PGES)**

*In Association with*



National Engineering Services  
Pakistan (Pvt.) Ltd



University of Engineering &  
Technology Lahore, Pakistan



Associated Consulting Engineers  
(Pvt.) Ltd. Lahore, Pakistan