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A Message from the Vice President

By Dr. Dennis E. Becker

INSIDE THIS ISSUE

It is my distinct honour and privilege to serve as Vice President (VP) North America for one year, with my term ending in 2009. Normally a Vice President's term is for four years. However, as Professor Hachich (VP South America) mentioned in his September 2008 "Message", Mr. John Seychuk, P.Eng. from Canada, who was selected VP North America in 2005, resigned in August 2008 due to health reasons. John Seychuk's enthusiasm, energy and "down to earth" (practical) style contributed significantly to the ISSMGE. It is quite apparent that I have "big shoes to fill" and that John is a "tough act to follow". Therefore, there was also some trepidation, along with honour and privilege, when I accepted the VP North America position. I'm also privileged that I have known John as a close professional colleague, mentor and friend for more than 30 years. This past and continued relationship with John increases the honour of being selected to replace him. I acknowledge and thank the ISSMGE Board for the warm welcome and vote of confidence that they have extended to me.

The North American Region of ISSMGE consists of the three member (country) societies of Mexico, United States and Canada. It is a tradition that the VP North America be selected, upon agreement from the three countries, on a rotational basis. For the term 2005-2009, the Vice President is from Canada. For the term 2009-2013, the position will be filled by the selected representative from Mexico. As my first formal duty, I'm pleased to announce that Professor Miguel P. Romo has been appointed to serve as VP North America from 2009-2013. Based on his qualifications and track record, I am confident that Professor Romo's contribution as VP North America will be noteworthy. His term will start following the XVII ICSMGE to be held in Alexandria, Egypt in October 2009.

There are approximately 4,000 individual ISSMGE members from North America (Mexico (395), United States (2,924) and Canada (680)), which represents about 23 % of the total individual memberships in ISSMGE. Each of the North American member societies have strong and active national geotechnical societies that serve and provide specific benefits to their members. A description of the three national societies and their activities can be found on their respective websites (Mexican Society for Soil Mechanics (http://www.smms.org.mx), Geo-Institute (http://content.geoinstitute.org) and Canadian Geotechnical Society (http://www.cgs.ca)).

Similar to the Australasian Region of ISSMGE, the North America Region, despite its small number of member (voting) societies and, hence a small regional "voice", contributes significantly and substantially to the international geotechnical community. This is achieved through active participation of individual members who assist in organizing international workshops, symposia and conferences, attend international events, publish papers and books, and participate on the various Technical Committees (TC) and Joint Technical Committees of the ISSMGE and sister societies of ISRM and IAEG. The North America Region has membership in all of the Technical Committees, including the Chair and Core Group members in about a third of the TCs. A complete list of the TCs and their membership can be found on the ISSMGE website.

In addition to annual conferences, specialty workshops, symposia, seminars and lecture series are organized each year by the respective member societies. As recent examples, the Mexican Society for Soil Mechanics held their XXIV National Conference in Aguascalientes City, Mexico in late November 2008. A Mexican National Conference of Soil Mechanics is held every two years, and includes special events such as the Nabor Carrillo Lecture, Manual Gonzales Flores Award and General Assembly Meeting. In Canada, the Canadian Geotechnical Society (CGS) held their 61st annual conference in Edmonton, Alberta, in September 2008.

A Message from the Vice President (continued)

By Dr. Dennis E. Becker

The Geo-Institute of the American Society of Civil Engineers (ASCE) represents a key ISSMGE member society from the United States. The Geo-Institute is very active and serves well its members by providing numerous activities each year on a variety of issues and topics that are timely and highly relevant to academia, research and industry. Each year, the Geo-Institute holds its Geo-Congress series of key annual conferences in different major cities across the United States. The Geo-Congress series of annual conferences are always well attended (of the order of 1,000 or more registrants) including a relatively high percentage of international delegates. Highlights of the conferences include the Terzaghi and Peck award lectures, as well as other prominent national and international keynote speakers. The most recent of these conferences was held in New Orleans in March 2008. The next conference will be in Orlando, Florida, which is a collaborative effort with many other national and international societies. The ISSMGE also plan to hold a Board Meeting in conjunction with the Orlando Conference.The

Canadian Geotechnical Society (CGS) represents Canada in the ISSMGE. More than 100 lectures, short courses, symposia and conferences are provided by CGS to local sections across Canada each year. The Cross-Canada Lecture Tour series is also provided each year and presented in about 15 cities across Canada. The annual tour consists of a Spring and Fall Lecture, one given by a prominent Canadian speaker and one by a prominent international guest speaker. The Cross-Canada Lecture Tour was started in 1966. The CGS also recently published the 4th Edition of the Canadian Foundation Engineering Manual (CFEM 2006) that is recognized as the national authoratative reference on foundation engineering practice in Canada. CFEM is also referenced and used by other countries.

The CGS consists of seven Technical Divisions (Soil Mechanics and Foundations, Rock Mechanics, Geo-Environmental, Hydrogeology, Engineering Geology, Geosynthetics and Cold Region Geotechnology). Therefore, in addition to the ISSMGE, the CGS has ties to many other international learned societies. The Soil Mechanics and Foundations Division members and members who claim ISSMGE as their choice for an international society comprise individual ISSMGE members. In essence, the CGS provides a unifying society for all geo-professionals in Canada. In this regard, it extends the concept of Federation of International Geo-Engineering Societies (FIGS) that was initiated in 2007, but covering only the geo-engineering disciplines of Soil Mechanics and Foundations, Rock Mechanics and Engineering Geology (i.e. ISSMGE, ISRM and IAEG). The concept of FIGS should embrace all geo-professional international societies. The interested reader is referred to the ISSMGE website and the President's Message from Professor Pedro Seco e Pinto in the ISSMGE Bulletin (Volume 2, Issue 1, March 2008) for more information on FIGS.

The Geo-Institute and CGS, in particular, encourage and provide significant collaboration with other geotechnical learned societies, such as Deep Foundations Institute (DFI), International Association of Foundation Drilling (ADSC), American and International Geotechnical Society (NAGS and IGS), American, Canadian and International Rock Mechanics (ARMA, CARMA and ISRM), Federal Highways Administration (FHWA), International Society for Micropiles (ISM), Association of Engineering Geologists (AEG), and International Permafrost Association (IPA). This collaboration provides significant benefits to the respective societies as well as the international geotechnical community. In addition to technical exchange, CGS and the Geo-Institute invite each other to have guest representation at annual Board Meetings of the respective societies. This interaction provides a sharing of insight, vision and best practices to enhance the operations and effectiveness of each society.

One of the duties of VP North America and VP South America is to serve on the Advisory Committee for the Pan-American Conference that is held every four years and hosted by ISSMGE member societies, alternating between South America and North America. The Pan-American Conference is the only common conference organized and hosted by two ISSMGE Regions. The last Pan-American Conference was held in Venezuela in 2007. Plans are now underway for the 2011 Conference to be hosted by Canada in Toronto. A Local Organizing Committee has been established and a meeting is planned to be held in Toronto in March 2009. I look forward to continued involvement on the Advisory Committee and working with the Local Organizing Committee members for the 2011 Pan-American Conference.

The above sections have described briefly some of the activities of the North America Region. Please accept my apologies if it is perceived that I have given too much emphasis to Canada and the CGS, given my past involvement as immediate Past-President of CGS and being a CGS member for 35 years. Based on the above summary, it is anticipated that the participation from the North America Region in the XVII ICSMGE in Alexandria, Egypt in October 2009 will be strong and significant. To sum up in the words of John Seychuk: "Business is as usual in the North America Region; the three member societies keep moving full steam ahead".

I take the opportunity (and perhaps liberty) of concluding this article with some thoughts about the important role and contribution that industry can provide to learned societies. The important relationship and interaction between learned societies and professional development is also discussed. It is noted that John Seychuk and I are one of the few (current and past) ISSMGE Board members from industry. I say this in a positive sense. ISSMGE has made substantial progress over the last few years to engage practitioners and increase its relevance to industry. Harry Poulos, Vic Milligan, John Seychuk, Suzanne Lacasse, Max Ervin (who I know personally) and others from industry have played a key role in raising the contribution and importance of industry participation in ISSMGE in recent years. The recognition of and support for the input and contribution by industry, by past and current ISSMGE Presidents, is acknowledged. Examples of this include special plenary sessions at ICSMGE and the Task Force on Industrial Liaison and Professional Practice.

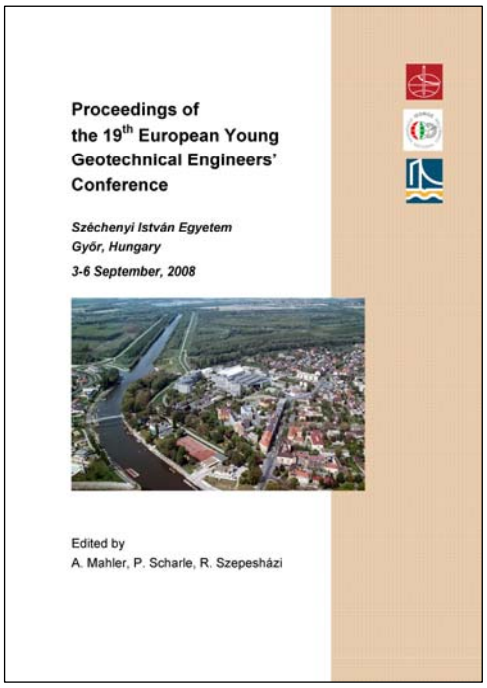
I believe strongly that industry can, and does, contribute significantly to the success and sustainability of learned societies. In addition, learned societies provide meaningful benefits and services to professionals, as part of their career and professional development. In my experience, a positive, complementary relationship exists with learned societies that is needed for enhancing career and professional development, and personal growth. However, in order to make this relationship work, one must participate. I have always been encouraged to participate and to contribute. I extend the same invitation to you.

View of Young Geotechnical Engineers

19th European Young Geotechnical Engineers' Conference

More than 20 of the European member societies (out of 35) had sent their delegates to Győr (Hungary), hosting town of the 19th Conference of Young European Geotechnicians on 3-6, September 2008. The campus of the Széchenyi István University and the lodging in the Hotel Révész (at a walking distance from the site) proved to be an adequate environment, even during the enrolment week for students of 11 thousands, starting with their Autumn semester.

The invitation released in January had met the underlying principles to follow, as accepted by the Board of ISSMGE for the iGECs in Brisbane last October. Rules about the paper submission and presentation were fulfilled, participants had got the proceedings at their registration. Participation fee could be kept slightly below the recommended limit, thanks to the ISSMGE support and generous contribution of Strabag Hungaria - the guidelines work well and efficiently.



The front cover of the conference proceedings

On the eve of the conference Tamás Szekeres, rector of the university delivered the greeting speech in the old Synagoge of Győr, recently renovated and converted into a cultural centre. In the presence of Pedro Séco e Pinto, Roger Frank opened the event officially. A short concert given by a brass-instrument ensemble of the Faculty of Music was followed by the get-acquainted reception. All ice, if any, had been broken during this evening.

During Wednesday and Thursday more than forty lectures of 12-15 minutes were presented by the participants. According to the guidelines, the sessions were „chaired by friendly, professional engineers", mainly senior members of the ISSMGE Hungarian National Committee. A dozen of young Hungarian engineers joined the delegates as invited observers. The audience was impressed with the continuous and active presence of the President and the European Vice President. Pedro and Roger entered and stimulated the discussion, took the burden of chairing sessions and were available for chats during the breaks. Besides, they delivered keynote lectures (*Lessons Learned From Two Case Histories of Retaining Structures* and *Geotechnical design of piles according to Eurocode 7,* respectively). Richard Ray (University of North-Carolina, now Fulbright visiting professor at the Széchenyi István University) talked about *Soil Dynamics Research and Development in the US*, and Peter Scharle (past president of the ISSMGE HNC) discussed *The role of case studies in the geotechnical education at different levels* (all of the submitted papers and several photos are available on the website www.ygec2008.hu).

Site of the Thursday dinner

Bishop's palace and Cathedral

View of Young Geotechnical Engineers (continued)

Aerial view of the downtown

Aerial view of Győr

Participants in the lecture hall, Széchenyi István University

Two days of hard work were encompassed with more relaxing evening programmes. A sight-seeing from the shipboard cruising the rivers of Győr preceeded a dinner with wine tasting on Thursday. Next day, the conference dinner took place at the Vidra Csárda (at a fishing lake site close to the Duna river). Starting with more formal issues, the results of the delegates' performance evaluation accomplished by the participants were announced. Winners of the competition, extended to the quality of papers and their presentation with respect to several points of professional content and technical delivery, were Vera *van Beek* (NL), Christian *Lackner* (AT), Anna Ramon *Tarragona* (ES), Hassan *Ali* (FR) and Carlo *Rabaiotti* (CH). The evening turned to be less formal when Richard presented himself as an experienced game organizer, creating groups, raising competition about questions of geotechnical history, phenomena, personalities and sites. Winners were happy with their prizes, loosers with the amusement. Folk dancers closed the dinner's program, successfully drawing the participants into dancing outside of the dinner hall in the warm September evening.

Those who had not found the night too short next morning at 7 could join the excursion to the 4th metro line under construction in Budapest, capital of Hungary. They were received in the public information centre by Gustav Klados, chief executive director of the project. Gus, a well known actor of the international tunnelling scene, presented a very detailed explanation of all questions about planning and construction. Subsequently, participants could see two sites with lined tunnels and stations in contstruction.

Reported by Prof Peter Scharle, chair of the Local Organizing Committe

Case History

Geotechnical Design for the Nakheel Tall Tower

By Chris Haberfield, Darren Paul, Max Ervin,
Golder Associates Pty Ltd, Melbourne, Australia

1. Introduction

The recently announced Nahkeel Tower in Dubai, UAE (Figure 1) will extend to in excess of 1 km in height and at about 2,000,000 tonnes dead load it will be one of the heaviest buildings on earth. The bearing pressures applied to the ground coupled with the soft rock ground conditions present at the site provided a significant challenge to the design of the footing system. The following presents a brief summary of the ground investigation undertaken and of the development of the footing system which is currently being installed.

Figure 1: Nakheel Tower, Dubai, UAE

2. Geology

An arid climate prevailed in the area during Holocene times facilitating the formation of coral reefs and shallow marine carbonate deposits. In addition, evaporite or Sabkha deposits, containing mainly gypsum are common and are associated with intertidal conditions on flat topography. The carbonate rich sedimentary sequence underlying the site comprises mainly carbonate cemented siltstone (calcisiltite). Gypsum layers of up to 2.5 m thick are interbedded with the carbonate materials at levels lower than 75 m below ground level. Recent aeolean deposits (sand dunes) form a capping over vast areas of the United Arab Emirates, including the Nakheel Tower site. Owing to different rainfall and groundwater regimes associated with past climates, the dune sands have become partially cemented forming calcarenite beds. At the Nakheel Tower site, the sand dune capping extends about 20 m below ground level.

Case History (continued)

Geotechnical Design for the Nakheel Tall Tower

3. Footing concept

Based on preliminary information, the proposed footing concept for the tower comprised a raft supported by large diameter piles or barrettes. The base of the raft would found below the sand dunes at about 20 m depth within the carbonate cemented siltstone with piles or barrettes extending perhaps to depths of 60 m to 70 m below this level. As piles/barrettes were to be installed from the surface, and given the expected ground conditions, it was considered that installing bored circular piles to these depths may prove to be problematic if not impractical, and hence the decision was made relatively early in the design process to adopt barrettes for the main deep foundation elements. The temporary basement retention system, constructed through the sand dune deposits, would comprise a circular diaphragm wall which was to be installed prior to the foundation barrettes. The barrettes were to be installed from the surface, with excavation to pile cut-off level to proceed once barrette installation was complete.

4. Ground investigation

On the basis of our previous experience at other sites in Dubai we were aware that when sampled and brought to the surface the carbonate cemented siltstone undergoes significant stress relief. This results in samples tested in the laboratory displaying significantly lower strength and modulus properties than measured by insitu testing. Significant emphasis was therefore placed on insitu testing, which comprised pressuremeter testing, cross hole sonic testing, water pressure testing and the testing of three full scale test barrettes. Laboratory testing was also undertaken to better understand the constitutive behaviour of the cemented carbonate materials. Laboratory testing comprised characterisation tests and specialist testing. Classification testing included unconfined compressive strength (UCS) testing with modulus measurement (end platten measurement) and tests for carbonate content, unit weight, specific gravity, moisture content and dry density. Specialist laboratory testing comprised cyclic and monotonic constant normal stiffness direct shear testing, resonant column testing, drained triaxial testing, cyclic triaxial testing and high pressure oedometer testing.

The ground investigation was undertaken by Fugro Middle East in accordance with specifications provided by Golder Associates Pty Ltd, Melbourne, Australia, office. Golder Associates' staff were on site during the ground investigation and independently logged the rock core. Preliminary analysis of the footing design concept was undertaken using PLAXIS 2D and assuming axisymmetric conditions. These analyses indicated that more than 50% of the calculated footing settlement would occur below the toe of the barrettes. For this reason, significant attention was paid to estimating stiffness parameters of the ground below the toe of the barrettes (from about 80 m depth to 200 m depth).

Nine geotechnical boreholes were drilled to between 150 m and 200 m depth using PQ triple tube drilling techniques. Immediately upon being recovered from the borehole, core was logged, photographed and samples were extracted. Moisture content testing was undertaken on site and samples scheduled for off site testing were wrapped in plastic film, placed in snug-fitting cardboard tubes and sealed in wax. As the rock materials were essentially unweathered, the application of a weathering classification system would be of little if any benefit. A relatively crude and simple hardness test was therefore developed to provide a continuous assessment of the core. The hardness test comprised inserting a knife into the core using a relatively constant pressure and measuring the penetration. The hardness values obtained through this process allowed assessment of the variation in ground conditions across the site and an estimate of potential tilt of the building under gravity loading. Pressuremeter testing was undertaken at 5 m intervals in three boreholes. Pressuremeter tests were taken to the working limits of the equipment and incorporated "hold" stages of up to an hour to measure the creep characteristics of the ground. Due to the significant depths at which testing was to be undertaken, pressure measurements were taken within the probe. The pressuremeter test results provided data on rock stiffness, strength and creep characteristics. Crosshole seismic testing to 200 m depth was undertaken in a further two boreholes. Two receiver boreholes placed 3 m and 6 m from the source boreholes were utilised in this testing. The cross hole seismic testing was analysed to provide continuous profiles of small strain shear modulus with depth.

5. Constitutive behavior and properties

The founding conditions comprise predominately carbonate or gypsum cemented materials with a relatively high void ratio (0.4 to 0.7). Laboratory and insitu testing indicated the material has a relatively high stiffness below a "bond yield strength" after which the compressibility of the material increases significantly and exhibits properties similar to an uncemented, normally consolidated material at the same void ratio. Prior to reaching the bond yield strength the behaviour of the rock is dominated by the intergranular cementation and displays approximately linear elastic behaviour with deformations occurring essentially instantaneously. As the bond yield strength is approached, deformations become time dependent and consolidation and creep displacements dominate. Satisfactory performance of the footing system for the tower therefore required that the stress increase in the ground due to the loads from the tower were kept below the bond yield stress. A primary aim of the ground investigation was therefore to obtain good estimates of the variation of rock modulus and bond yield strength with depth. Figure 2 compares the Youngs modulus values estimated from the pressuremeter, cross hole seismic and laboratory UCS tests. The pressuremeter test results display similar initial loading and unload reload moduli values which is consistent with the absence of jointing in the rock and the domination of the cementation. The Youngs modulus values obtained from the pressuremeter and cross hole seismic tests show reasonable agreement (see Figure 2) if the small strain modulus values obtained in the cross hole seismic tests are reduced by a factor of five.

Case History (continued)

Geotechnical Design for the Nakheel Tall Tower

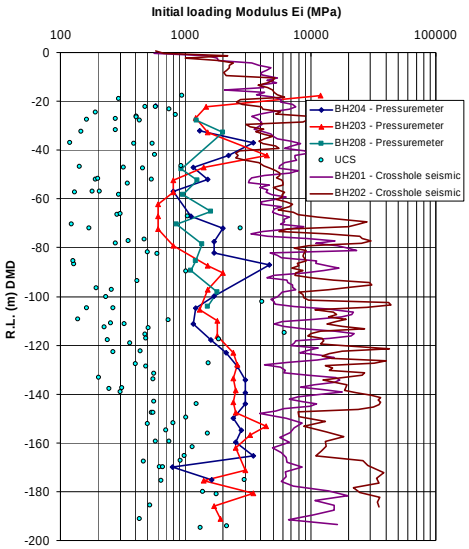


Figure 2: Young's modulus variation with elevation (surface level RL+2.5 m DMD)

An elastic, perfectly plastic (purely cohesive) constitutive model was found to provide an excellent fit to the pressuremeter expansion curves. This is consistent with the dominance of the intergranular cementation below the bond yield strength and should not be confused with "undrained" yield strength behaviour. We have interpreted the shear strength so obtained as an estimate of the bond yield strength. Figure 3 compares the shear strengths measured in the UCS tests (taken as UCS/2) and those estimated from the pressuremeter tests assuming a purely cohesive strength criterion. Figures 2 and 3 show that stiffness and strength properties measured in the laboratory were significantly less than obtained from insitu tests, and supported our hypothesis that the core samples were undergoing significant stress relief even with the care that was undertaken during the drilling, retrieval, storage, transportation and testing processes.The full scale barrette load tests (see below) confirmed that the properties obtained from the insitu testing were reasonable and that the laboratory test results significantly under-estimated the properties of the insitu rock.

6. Barrette load tests

As part of the ground investigation, three full scale test barrettes were installed and tested in accordance with a specification provided by Golder Associates. The test barrettes were installed by a Soletanche-Bachy/Intrafor Joint Venture and load testing of the barrettes was carried out by Loadtest International Inc. The load tests comprised two levels of Osterberg cells in each test barrette as shown in Figure 4. Each level of cells was capable of providing a working bi-directional load of 54 MN. However, during testing loads were increased to the capacity of the equipment resulting in bi-directional loads of up to 83 MN. On the basis of a preliminary concept for the footing design, barrettes were located under the main load bearing elements of the structure. This resulted in barrettes at relatively close centres and, as a consequence, most of the applied load would be transferred towards the toe of the barrettes. For this reason the Osterberg cells were positioned to measure performance of the lower 20 m or so of the barrettes. The test barrettes were instrumented with displacement telltales and strain gauges. In addition, instrumentation was also located in the rock below the toe of the barrette to directly measure the displacement of the rock at this location. The barrette load tests were used to investigate load deformation behaviour of the shaft and base of the barrette under static, cyclic and long term conditions. The measured load versus displacement performance of the two shorter test barrettes (TB02 and TB03) for loading at the lower and upper levels of Osterberg cells are shown in Figures 5 and 6 respectively. Also shown are the true Class A predictions of the performance. The Class A predictions were obtained on the basis of the adopted design properties for the ground and on the as-constructed barrette geometry. The predictions of performance were completed prior to testing of the barrettes.

For the Class A prediction, the rock-socket software ROCKET97 (Seidel, 2000) was used to calculate the shaft resistance performance of the test barrettes. The calculated shaft resistance performance was then used in an axisymmetric PLAXIS V8 model to obtain the calculated load versus displacement response shown in Figures 5 and 6. The comparison between the measured and predicted response is excellent, which provided further confidence that the design properties adopted on the basis of the insitu testing were appropriate. PLAXIS V8 was also used to calculate the design top-of-barrette load versus displacement performance shown in Figure 7. Figures 5, 6 and 7 clearly demonstrate the relatively stiff and strong response of barrettes in these ground conditions. Similar results were obtained from the other two test barrettes.

Case History (continued)

Geotechnical Design for the Nakheel Tall Tower

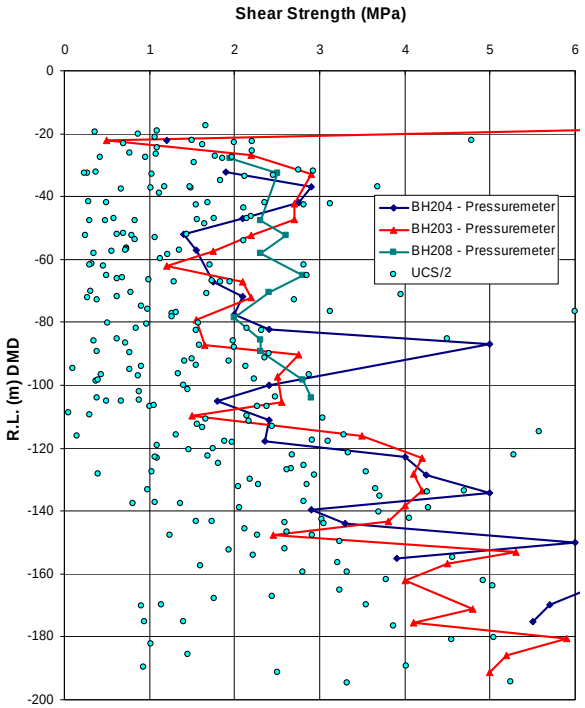


Figure 3: Shear strength variation with elevation surface level RL+2.5 m DMD)

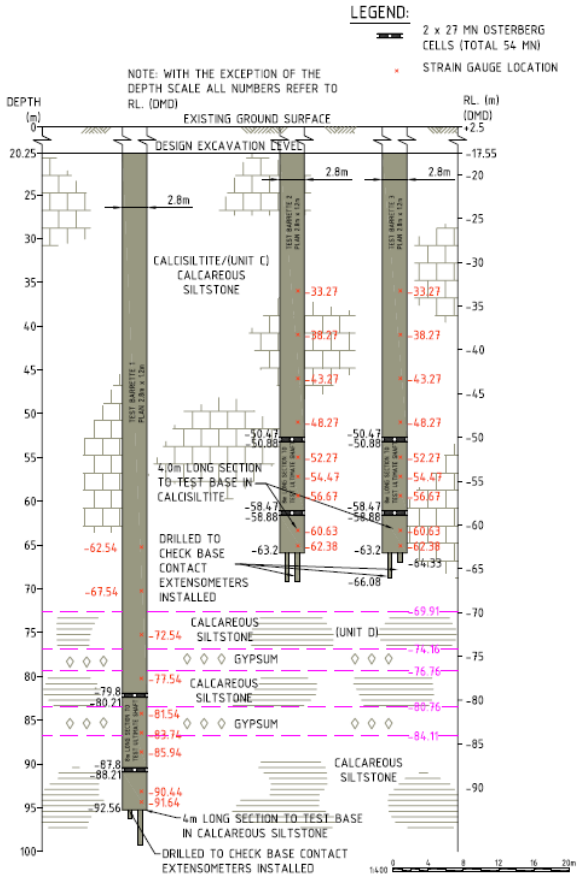


Figure 4: Test barrette configuration

7. Footing design and analysis

The results of the above investigations were used to assess design profiles of strength and Youngs modulus with depth to a depth of 200 m. Profiles of credible upper and lower bound properties were also assessed.Preliminary analyses of the footing system were undertaken using PLAXIS V8 (axisymmetric). Barrettes were modelled either as rings of equivalent structural plate elements or equivalent concrete/rock blocks. Interface elements were used to model the shaft resistance performance of the barrettes, with shaft resistance values adjusted to account for the difference in shaft area between the two-dimensional model and the actual three-dimensional conditions. Similar results were obtained using both plate elements and concrete/rock blocks. Significant consideration was given to the practicality of obtaining clean bases (free from debris) to the barrettes, and hence analyses were undertaken assuming both full and no base resistance. Another important consideration was to stagger the length of the barrettes such that the concentration of load towards the toe of the barrettes was spread over a greater volume of rock and the risk of exceeding the bond yield strength of the ground was reduced.

The PLAXIS V8 results were further analysed to provide estimates of individual top-of-barrette stiffness values and stiffness values for the rock supporting the raft. Due to the axisymmetric assumption, stiffness values varied with radius from the centre of the tower. On the basis of additional analyses, barrette stiffness values were adjusted according to their location within a group of barrettes (eg at the corner and centre of a group). The stiffness values were provided to the structural engineers for the project for use in their structural models of the tower. This allowed column loads to be refined and the barrette layout and raft thickness to be modified accordingly. The above process was repeated until there was convergence between the structural and geotechnical models for the footing system refined by the above process. Detailed three dimensional analyses of this footing system were then undertaken using the finite element software PLAXIS 3D. In general, the three dimensional analyses gave settlement profiles and barrette structural actions (loads, shear forces, bending moments) that were consistent with those obtained from the axisymmetric (PLAXIS V8) analyses. PLAXIS 3D analyses were undertaken for several serviceability and ultimate limit state load cases; design, credible upper and lower bound properties, and assuming full and no base resistance to the barrettes. The analyses indicated acceptable performance under all conditions analysed. Probablistic analyses were also carried out to assess the potential tilt of the tower due to variations in ground conditions across the site and to provide a probabilistic estimate of settlement. Measured field hardness values were used as the basis of the assessing the variability.

Case History (continued)

Geotechnical Design for the Nakheel Tall Tower

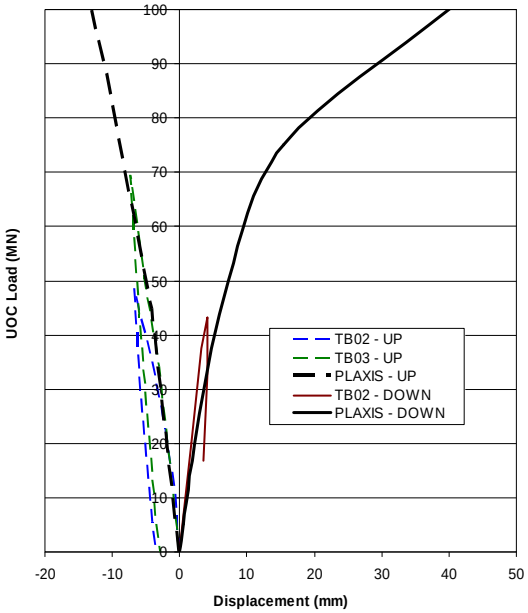


Figure 5: Measured vs predicted performance for loading at upper cells

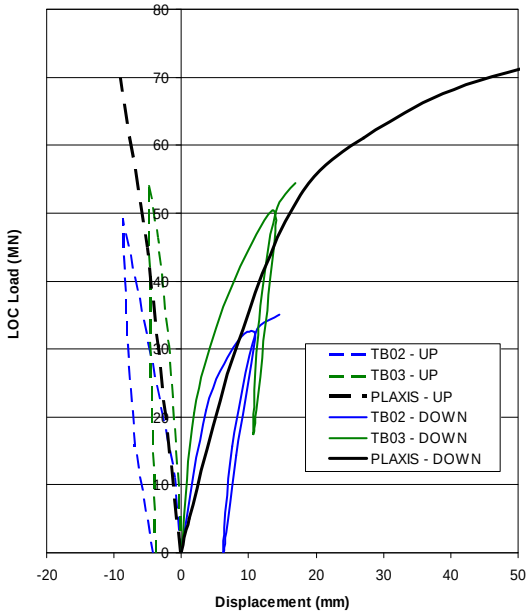
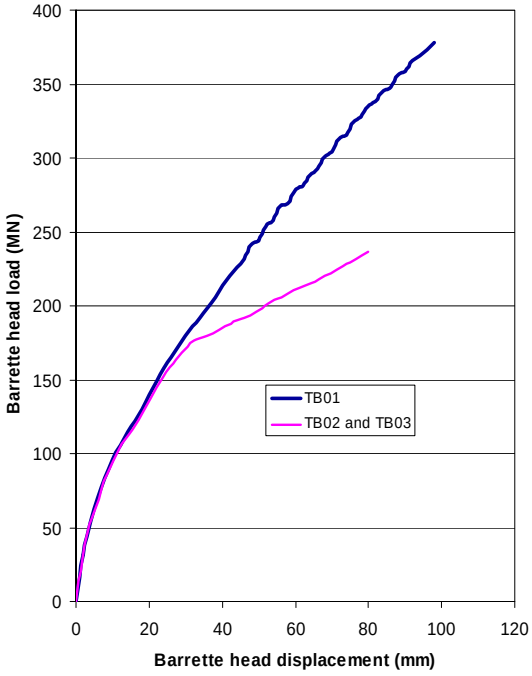


Figure 6: Measured vs predicted performance for loading at lower cells



versus displacement performance

Figure 7: Calculated barrette head load

8. Closing comments

Construction of the foundation system is currently underway. Golder Associates has personnel on site to assist in maintaining the quality of construction of the barrettes. This is being facilitated through base drilling of select barrettes, cross hole sonic testing, maintenance and quality control of drilling fluids and checking of positioning and measurements. It is intended that instrumentation will be installed to monitor surface displacements and barrette loads during construction.

9. Acknowledgement

The authors gratefully acknowledges FoundationQA Pty Ltd for the use of ROCKET97

10. References

Seidel, J.P. (2000). *ROCKET97 Help Manual*. Department of Civil Engineering, Monash University

Activity of Member

The British Geotechnical Association

Brief History of the Association:
The British Geotechnical Association has a long history, formally stretching back to 1949. However, before that time enthusiasm for geotechnical engineering as a new branch of civil engineering was increasing. Leonard Cooling was the only British representative to attend the First International Conference on Soil Mechanics and Foundation Engineering (organised by the ISSMFE) in 1936, but by the Second International Conference in 1948, the Institution of Civil Engineers (ICE) has formed a British National Committee to coordinate sending delegates and papers to the conference. Following the conference, when it had been decided to set up national sections, the British National Committee of the International Society for Soil Mechanics and Foundation Engineering was inaugurated in 1949.
Following the formation of the International Society for Rock Mechanics in 1962, it was agreed to enlarge the scope of the British National Committee, and hence in 1963 the committee became the British Geotechnical Society (BGS), with the society affiliated to both international societies. The British Geotechnical Association (BGA), as it is now known, was formed later, in 2000 following the merger of the BGS and the Ground Board of the ICE. So, taking into account its past history, the BGA will be celebrating its 60th anniversary in 2009.

Role of the Association:
The object of the Association is the advancement of public education in the subject of soil and rock mechanics and engineering geology and in their application. As the Ground Board of the ICE, the BGA also fulfils the organisation's role as a learned society, including:

- the publication of papers, guides, reports and briefing sheets
- running events and competitions
- awarding prizes
- managing collaborative research projects
- organising prestigious lectures
- responding to public consultation papers

2007 Fleming Award Winners – Amsterdam Metro Team

Activities:
The BGA organises numerous events every year, from its popular evening speaker and discussion meetings to an Annual Conference for the membership. Recent diverse topics of discussion have included: rock tunnel and cavern construction in New York, climate change and geotechnics, numerical modelling and maintenance of ageing earthworks. The association also organises the internationally renowned Rankine Lecture, which this year was delivered by Andrew Charles on the topic of "the engineering behaviour of fill – the use, misuse and disuse of case studies." In addition to this prestigious event, the membership has also enjoyed our annual international touring lecture series, this year delivered by Professor Carlo Viggiani of the University of Napoli Federico II.

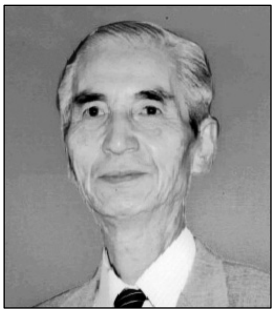
The BGA organises and awards a number of prizes every year, including the Cooling Prize for Young Geotechnical Engineers. This paper writing and presentation competition also helps to select delegates for the European Young Geotechnical Engineers Conference, to which the BGA sends two representatives every year. Other prizes include the BGA Prize award for published work and the Fleming Award (pictured above) for excellence in design and construction in honour of Ken Fleming. The BGA also sponsors a number of conferences, including the recent and highly successful 2nd BGA International Conference on Foundations, which was held in Dundee in June this year. The conference included over 150 papers from 40 countries, providing an international perspective of the latest advances in foundation engineering in research, design and practice. The topics covered included piles, excavations, and offshore foundations, ground behaviour and improvement, shallow foundations and slopes.


Delegates at the European Young Geotechnical Engineers Conference in 2007

Reported by Ms. Fleur Loveridge

News

In Memoriam
Koichi Akai(1927-2008)



Koichi Akai, Emeritus Professor of Graduate School of Engineering at Kyoto University, Kyoto Japan died of pneumonia on Friday September 26, 2008 at the Hospital in Kyoto. He was born in Osaka, Japan November 28, 1926.

Akai Koichi received Bachelor degree of Civil Engineering 1950 and Doctor of Engineering degree for Civil Engineering 1957, both from Kyoto University. He jointed the Civil Engineering Department of Kyoto University as a lecturer and was a Professor of the Department of Civil Engineering from 1962 to 1990. Prof. Akai stayed at soil mechanics laboratory of Prof. Schultze at T.H. Achen1958-1959 as a visiting researcher, and then he moved NGI November 1959 and was a visiting researcher of NGI at Norway for one year. Since 1990 Professor Akai was a professor emeritus of Kyoto University and from 1990 to 2002 Professor Akai was a president of Geo-Research Institute, Osaka. Prof. Akai greatly contributed to the geotechnical subjects that include seepage flow, deformation and strength characteristics of soil, rock mechanics, Soil dynamics etc. and authored over 250 technical publications and four books including Analytical Background of Geomechanical Phenomena -- A Treatise on Staring the Geo-Chaos. In 1978, he was awarded the Japan Society of Civil Engineers prize. Prof. Akai served as a chairperson of the organizing committee for 8th Asian conference of SMFE at Kyoto 1987 and was a chairperson of TC22 of ISSMGE on Indurated Soils and Soft Rocks from 1989-1993. He worked as a president of Japanese Geotechnical Society from 1992-1993. From 1989 to 2000, Prof. Akai was a chairperson of the advisory committee of the construction of Kansai International Airport which was awarded as one of 10 "Civil Engineering Monuments of the Millennium" in the world built over the past century from ASCE.

Reported by Professor Fusao Oka

News

The 4th International Conference on Scour and Erosion (ICSE-4), 5-7 November 2008, Tokyo, Japan

The Fourth International Conference on Scour and Erosion (ICSE-4) was successfully held at Surugadai Memorial Hall of Chuo University in Tokyo under the auspices of ISSMGE Technical Committee TC33 on Scour and Erosion (Chair: Professor Jean-Louis Briaud, USA). The Japanese Geotechnical Society (JGS) played a pivotal role in the organization of the conference (Chair: Professor Hideo Sekiguchi), with supports from the following institutions: Japan Society of Civil Engineers, Japan Society of Erosion Control Engineering, The Japan Landslide Society, Chuo University, Disaster Prevention Research Institute of Kyoto University and Association for Disaster Prevention.

The ICSE-4 provided a forum to discuss new developments, concepts and practices, and to share field experiences, problems and solutions dealing with scour and erosion issues in hillslope, fluvial, estuarine and coastal environments. It inspired in-depth discussions of the integrity of structures in and near water bodies, which include: bridge piers; flood-control levees; revetments; groins; water-retaining fills; underground utilities; seawalls; breakwaters; offshore wind-turbine foundations; and marine pipelines. Also, ICSE-4 addressed a broader perspective for scour and erosion issues from standpoints of sediment routing systems and integrated sediment management. The 3-day conference consisted of 7 keynote lectures and 89 oral presentations. It had a total of 150 participants from more than 20 countries. The conference proceedings with a CD (available from JGS) contain the 7 keynote papers as well as 102 research papers which were peer reviewed. The seven keynote lectures highlighted the conference:

1. "Case histories in soil and rock erosion: Woodrow Wilson Bridge, Brazos River Meander, Normandy Cliffs, and New Orleans Levees" by Professor Jean-Louis Briaud, USA
2. "The physics of local scour at bridge piers" by Professor Bruce Melville, New Zealand
3. "How is the gap between the concept and practice of integrated sediment management bridged?" by Dr. Koh-ichi Fujita, Japan
4. "Design and practice of scour and erosion countermeasures in waterways" by Dr. Michael Heibaum, Germany
5. "A comprehensive study on sediment movement in Tenryu River Watershed and Enshu Coast" by Professor Shinji Sato and Dr. Haijiang Liu, Japan
6. "Coastal and offshore scour/erosion issues – recent advances" by Professor B. Mutlu Sumer, Denmark
7. "Tsunami scour and sedimentation" by Professor Harry Yeh, USA.

The additional features of ICSE-4 include the performance of the Evening Session on Day Two (6 November 2008) at the Hotel Metropolitan Edmont, as well as the two preconference technical visits (TV1: Tour on the Arakawa River; and TV2: TIA Runway Construction Work on Tokyo Bay).

Further information is available at http://icse-4.kz.tsukuba.ac.jp/.

Group photograph taken in the ICSE-4 Evening Session

Reported by Professor Hideo Sekiguchi

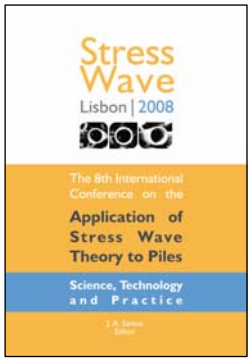
News

The 8th International Conference on the Application of Stress-Wave Theory to Piles
Lisbon, Portugal, 8-10 September 2008

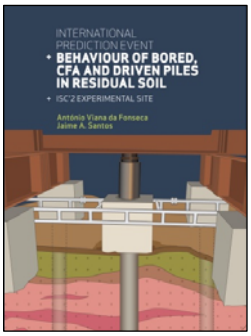
On a four-yearly basis and starting in 1980, the Stress Wave conference has been organized in several countries: Sweden (1980 and 1984), Canada (1988), Netherlands (1992), United States of America (1996), Brazil (2000) and Malaysia (2004).

The 8th International Conference on the Application of Stress-Wave Theory to Piles (SW2008) was held in Lisbon, Portugal from September 8-10, 2008. The Conference was organized by Instituto Superior Técnico under the auspices of the International Society for Soil Mechanics and Geotechnical Engineering ISSMGE TC 18 and the Portuguese Geotechnical Society (www.civil.ist.utl.pt/sw2008). The organizer and host was Prof. Jaime Santos of Instituto Superior Técnico of the Technical University of Lisbon.

A diverse and international group of 190 researchers, practitioners and academicians from 45 countries gathered at Lisbon to share experiences and findings on dynamic pile testing. Special guests in attendance included ISSMGE President Prof. Pedro Sêco e Pinto and TC 18 chairman Prof. Rolf Katzenbach. A total of 101 technical papers including 7 keynote lectures have been compiled by Millpress in one-volume hardcover printed copy plus CD for the event. The volume is divided in 14 chapters according to the conference themes: Wave mechanics applied to pile engineering; Relationship between static resistance to driving and long-term static soil resistance; Case histories involving measurement and analysis of stress waves; Dynamic monitoring of driven piles; Dynamic soil-pile interaction models - numerical and physical modelling; High-strain dynamic test; Low-strain dynamic test; Rapid-load test; Monitoring and analysis of vibratory driven piles; Correlation of dynamic and static load tests; Quality assurance of deep foundations using dynamic methods; Incorporation of dynamic testing into design codes and testing standards; Ground vibrations induced by pile motions; Dynamic measurements in ground field testing.



In addition, the SW2008 Conference included a Special Session on the ISC'2 International Pile Prediction Event. It was a class A prediction event organized by the Faculty of Engineering of the University of Porto and Instituto Superior Técnico under the auspices of ISSMGE TC 16 and TC 18. Four years after, a book containing the predictions and a report with the main conclusions and lessons learned from this experience was prepared and offered to the SW2008 participants.



To encourage young researchers interest in pile dynamics issues, the organizing committee invited all authors under 30 years old to join the paper competition. The jury composed by Dr. Bengt Fellenius, Prof. Pedro Sêco e Pinto and Dr. Frank Rausche judged the work and presentation of the candidates and the winner was Dr. Sofia Costa D'Aguiar.

Besides the exciting technical program, during the conference social events included a welcome reception, a banquet and local sightseeing tours of the city. The lovely banquet took place at the historic Water Museum with a tasteful selection of Portuguese cuisine and a special performance with Fado music.

After this successful event we are already looking forward to the next Stress Wave Conference!

Reported by Professor Jaime Santos

News

65th Anniversary of the State Research Institute of Building Constructions,Ukraine

The State Research Institute of Building Constructions (NIISK) was established on the 26th November, 1943 in the USSR. The main purpose of the Institute at that time was the immediate reconstruction of structures that had been destroyed during the Second World War.

Today, NIISK (with more than 500 specialists) is the main Research Institute for Construction in the Ukraine, establishing technical policy relating to the use of concrete and reinforced concrete, and creating a normative base for the calculations and design of concrete, reinforced concrete, stone, timber and other structures.

As established in Ukrainian legislation, NIISK is the lead organization in the development of:

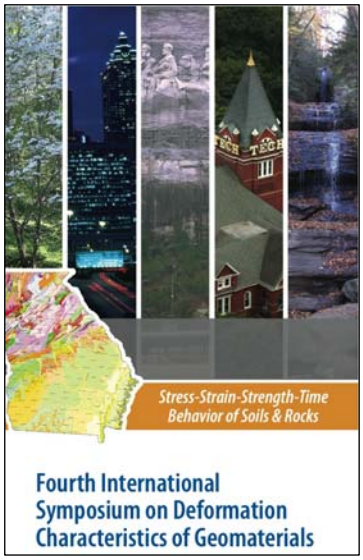
- Geotechnical questions of Construction;
- Seismic construction;
- Standardization and Normalization in Construction;
- Building structures in both normal and complex geotechnical environments;
- Construction physics;
- Methods and means for research, quality control and testing of construction products and materials;
- Durability and safety (including fire safety) for buildings and structures;
- Scientific-research surveys of construction with high level of responsibility and technical competence;
- Scientific survey of construction activity for atomic energy, including the Chernobyl Nuclear Power Plant “Shelter”;
- Proving of conformity for construction, including interaction with UEAtc;
- Economics of building structures and pricing of scientific activity in construction;
- Training of highly qualified scientists by means of post-graduate courses.

In 2002, the “Ukrainian Society for Soil Mechanics, Geotechnical and Foundation Engineering” was established within the NIISK, and that society has been a full member of ISSMGE since 2003. We warmly congratulate the NISSK on this memorable anniversary, and wish it every success in its future contributions in the field of Soil Mechanics and Geotechnical Engineering.

Reported by Vladimir Senatorov, the Ukrainian Society for Soil Mechanics, Geotechnical and Foundation Engineering.

News

The 4th International Symposium on Deformation Characteristics of Geomaterials



The Geosystems Engineering Group at the Georgia Institute of Technology hosted the 4th International Symposium on Deformation Characteristics of Geomaterials (IS-Atlanta 2008) in Atlanta, Georgia on September 21-24, 2008. This event was organized under the ISSMGE Technical Committee TC29 on Laboratory Stress-Strain-Strength of Geomaterials and was the latest of a series of successful symposia on the deformational response of soil and rock from field tests, lab measurements, and numerical simulations, including IS-Hokkaido 1994, Symposium in Print - *Geotechnique* (London, 1997), IS-Torino 1999, and IS-Lyon 2003. The program details are posted at: www.isAtlanta2008.org.

More than 140 researchers, practitioners, and students from Africa, Asia, Australia, Europe, and North and South America attended the symposium. Keynote lectures were presented by Junichi Kosecki (University of Tokyo); Barry Lehane (University of Western Australia); David Muir-Wood (University of Bristol); Radu Popescu (Memorial University); Leo Rothenburg (University of Waterloo); Marika Santagata (Purdue University); Dawn Shuttle (University of British Columbia); Ken Stokoe (University of Texas at Austin); and Cino Viggiani (Université Joseph Fourier). Eighty-five technical presentations were given in the following plenary sessions:

- Natural Geomaterials and Reconstituted Soils
- Cemented and Stabilized Soils
- Rheology, Strain Rate, and Aging
- Scale and Spatial Variability
- Unsaturated Soils and Frozen Geomaterials
- Anisotropy
- Soils with Inclusions
- Laboratory Methods – Small Strain
- Laboratory Methods – Large Strain
- Field Methods
- Analytical and Numerical Methods

The symposium proceedings are available in a two-volume hardcover book and accompanying CD-ROM published by Milpress-IOS Press.

A one-day Research Symposium on Characterization and Behavior of Interfaces (CBI) was also held to focus on a topic that has emerged in importance over the past decade. Over 50 participants listened to 18 presentations describing recent findings and ongoing studies that included: laboratory characterization of interface materials; behavior of geotechnical interface systems; numerical multi-scale modeling of geotechnical interfaces; in-situ measurement of interface response; and interfaces involving man-made materials and surface lubrication techniques. Lively discussion sessions throughout the symposium led to further sharing of knowledge with respect to topics such as scale effects, rate effects and healing effects. The CBI Research Symposium proceedings will also be available as a single volume hardcover book and accompanying CD-ROM published by Milpress-IOS Press.

The 5th International Symposium in the Deformation Characteristics of Geomaterials series will be hosted by the Korea Advanced Institute of Science and Technology (KAIST) in 2011.

Reported by Dr. Glenn J. Rix

News

ISSMGE TC28 workshop held in Budapest

A very successful workshop organised under the aegis of TC28 (Technical Committee for Underground Construction in Soft Ground) was held at the Budapest University of Technology and Economics (BME), Hungary on 12th and 13th September 2008. The workshop was organised by Professor József Mecsi in collaboration with the Hungarian Tunnelling Association, Budapest and Pest Country Chamber of Engineers, Municipality of Budapest, BME and Pollack Mihály Faculty of Engineering, University of Pécs.

The workshop had two main components: a day of lectures and discussion followed by a day of site visits in conjunction with the construction works for two of the new Budapest Metro Line 4 stations. There were also two major social events organised. The workshop was attended by 52 members from TC28 and other organisations, both academic and from industry, from around Europe.

Welcoming addresses were given by the chairman of TC28, Professor Richard Kastner, Dr Ferenc Olti, Deputy Managing Director of Budapest Transport Coorporation and Prof Mecsi. These were followed by a series of lectures concerning the new Metro Line 4 relating to the geology and geotechnical conditions, particularly concerning where the tunnels pass beneath the river Danube, and the design and construction of the new metro and its stations, emphasising problem areas.

In the afternoon there were workshop presentations and discussion by several of the participants covering general topics such as the effects of tunnelling on existing tunnels and surface structures and the use of neural network analyses. Aspects of the analysis and design of the new stations were also presented with emphasis on retaining walls and settlements and monitoring data from the construction of two of the stations were shown.

The first day's presentations and discussions set the scene for the next day's site visits, giving everyone an overall appreciation for the geotechnical design and construction issues involved. In the evening, workshop members attended a welcome party at the atmospheric Budapest Museum of Transportation.

On the Saturday, visits were made to the new stations under construction at Rákóczi Square and Fövám Square. This was a very interesting day as the stations are close to completion but with sufficient construction works still underway for the participants to grasp some of the challenges that had been faced. It also allowed them to see (and feel!) the soil conditions first hand. Many features of the construction were explained to the group by members of the design and construction teams. These were very enlightening visits, especially after the previous day's lectures.

In the evening the workshop was concluded with a gala dinner held at Visegrád. First, at a medieval castle overlooking the Danube, members watched a spectacular display of skills at a knights' tournament - they were even allowed to participate afterwards! This was followed by a very memorable dinner where everyone was dressed and fed in medieval style! Prof Kastner extended everyone's heartfelt thanks to Prof Mecsi for organising the workshop, saying that it had been very interesting and informative professionally and very pleasant socially.

Presentations and photographs from the workshop can be found at: http://issmge-tc28-hungary.net

Reported by Jamie Standing

News

11th Baltic Sea Geotechnical Conference
GEOTECHNICS IN MARITIME ENGINEERING
Gdansk, Poland
15-18 September 2008

After many years of neglect in Poland in the area of broadly defined maritime policy, with a great deal of hope we are noticing the first signs of revival in the maritime construction field, and in the geotechnical engineering in particular. It coincides with the enlargement of the Department of Geotechnics under the expanded name of the Department of Geotechnics, Geology and Maritime Engineering (GGME) in the Faculty of Civil and Environmental Engineering of the Gdansk University of Technology.

At the request of the Board of Directors of the Polish Geotechnics Committee (PKG) and thanks to the special efforts of its President, Prof. Zbigniew Młynarek, and of its Honorary President, Prof. Eugeniusz Dembicki, decision to grant the organization of the 11th Baltic Sea Geotechnical Conference was made by the Presidents of the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), its President Prof. Pedro Seco e Pinto and the vice President for Europe Prof. Roger Frank. This prestigious choice of GGME as the organizer of the conference, under the leadership of Prof. Zbigniew Sikora, its chair, was justified not only from a formal point of view, but also from historical considerations, because the first Conference of Soil Mechanics and Foundations of the Baltic Countries was organized in Gdańsk in 1975 from the inspiration of Prof. E. Dembicki, chairman of the Geotechnical Department at that time.

The 11th Baltic Sea Geotechnical Conference on the topic „Geotechnics in Maritime Engineering" was held on the 15-18 of September 2008 in Gdansk under the auspices of ISSMGE, PKG and the Gdansk University of Technology.

Photo. 1. The Southern Courtyard of the Gdansk Technical University with the conference participants, see also www.11bc.pg.gda.pl. Photo Dr. R. Ossowski

The proceedings were held at the university in the historical Aula lecture hall and the adjacent modern teaching rooms together with the Southern Courtyard (see photo 1), and the New Auditorium lecture hall (photo 3).

Almost 280 participants from 30 countries participated in the conference, including from Poland (138), Germany (33), Estonia (13), the Netherlands (10). There were participants from the USA, Japan, Brazil, and many other countries, not only from the Baltic countries. This worldwide interest was dictated mainly by the aptly selected subject matter for the conference. The lead theme of the proceedings was applying geotechnical solutions in the maritime construction. World-class experts in the fields of geotechnical and maritime building engineering, representing both the theoretical, as well as the practical fields, were present at the conference. There were scientists dealing with geotechnical problems of ports, offshore and onshore structures, young scientists – doctoral students, as well as practising engineers, dealing with the design and the execution of objects of the maritime infrastructure.

News

Phot. 2. The opening speeches of the Conference on the Southern Courtyard of the Gdansk University of Technology, see also www.11bc.pg.gda.pl. Photo Dr. R. Ossowski

The ceremonial opening of the conference was attended by officials of the Tricity agglomeration – President of Gdansk - P. Adamowicz and President of Sopot - J. Karnowski and a large number of invited representatives of the Marshal's Office, the Province Office, and directors of many leading firms from throughout Poland.
The organizing committee consisted of a team of the academic faculty from GGME together with the former and present presidents of PKG, i.e.

- Zbigniew Sikora, the chairperson and the current chair of GGME,
- Zbigniew of Mlynarek, the vice chairperson and the immediate past President of PKG,
- Zbigniew Lechowicz, current President of PKG,
- Kazimierz Gwizdala, PKG secretary,
- Bohdan Zadroga, professor at the Gdansk University of Technology and the immediate past chair of GGME

and scientific secretaries:

- Lech Balachowski,
- Tadeusz Brzozowski,
- Marcin Cudny,
- Andrzej Danilewicz,
- Angelika Duszynska,
- Grzegorz Horodecki,
- Adam Krasinski,
- Arkadiusz Kryczallo,
- Krzysztof Malesinski,
- Rafal Ossowski,
- Mariusz Wyroslak.

Interest in the subject matter of the conference surpassed expectations of the organizers. Altogether 124 papers were submitted, which after 2 peer-reviews were published in bound form in printed conference materials, and in the electronic form enclosed on compact disk of the Proceedings (see: www.11bc.pg.gda.pl). Reviews were done by members of the International Scientific Committee and selected experts from Poland.

News

The International Scientific Committee included:
- Eugeniusz Dembicki – as chairperson,
- Anne Braaten,
- Hainz Brandl,
- Valters Celmiņš,
- Liudas Furmonavičius,
- Hakan Garin,
- Georg Heerten,
- Vyacheslav Ilyichev,
- Michele Jamiołkowski,
- Suzanne Lacasse,
- Tom Lunne,
- Silvano Marchetti,
- Rainer Massarsch,
- Manfred Nußbaumer,
- Antonia Soriano,
- Jørgen Steenfelt,
- Tarmo Tarkkio,
- Hardi Torn,
- William Van Impe,
- Wojciech Wolski.

An international group of experts in the field of geotechnical engineering performed the advisory role in the organization of the conference:
- Zbigniew Mlynarek, as the chairperson of the Committee and President of PKG,
- Pedro Seco e Pinto, President of ISSMGE,
- Roger Frank, vice President of ISSMGE for Europe,
- Neil R. Taylor, General Secretary of ISSMGE,
- Mait Mets, Chairperson of the Organizing Committee of the 10th Baltic Sea Geotechnical Conference,
- Meindert Van, Chairperson of Technical Committee 1 (TC-1) ISSMGE,
- Maria Manassero, Chairperson TC-5 ISSMGE,
- Paul Mayne, Chairperson TC-16 ISSMGE,
- Rolf Katzenbach, Chairperson TC-18 ISSMGE,
- Zygmunt Meyer, Full Professor at the Szczecin Technical University.

Thematically the conference was divided into eight problem sessions:
1. aspects of practical applications of geotechnics in maritime engineering,
2. laboratory tests,
3. field tests and methods of soil characterisation,
4. bedding of onshore and offshore structures,
5. influence of climatic changes on the technology of embankments and shoreline protections,
6. theoretical solutions and numerical modeling,
7. geotechnics and the environment,
8. geotechnical standards and recommendations in maritime engineering.

The subject matter of session 5 concerned issues being an object of workshop within the frames of activity of Technical Committee 1 (TC 1), which was a part of debate of the conference.
Two separate sessions constituted presentations of the sponsoring companies and session of the so-called Poster Presentations. Altogether there were 10 sessions, in which 79 papers were presented, selected by the Scientific Committee for the oral presentation.
The structure of the conference ran according to plan established by the advisory group:
- presentation of two panel lectures,
- specially invited lecture, and
- presentations of selected papers (given by authors).

Chairpersons of individual sessions were responsible for the formal order of the session, two designated experts supervised discussion of the subject matter of the session.

Such a form of discussion and presentation proved to be very effective – a majority of participants of the conference expressed this opinion.

News

Taking advantage of the participation of many members of Technical Committees of ISSMGE, during the conference the following separate meetings took place:

- of Technical Committee TC-16, under the leadership of the Prof. P. Mayne (USA),
- of Technical Committee TC-1, with the participation of the chairman Dr. M.A.. Van (Netherlands).

Under the leadership of the Prof. R. Frank, a meeting of the representatives of the Baltic Countries was held for the purpose of selecting the country for the next, 12th Geotechnical Conference of the Baltic Countries. The unanimous choice was the German Committee for Geotechnics (www.dggt.de; Deutsche Gesellschaft für Geotechnik e.V.) under the leadership of Prof. Manfred Nußbaumer, which the selected accepted with great satisfaction.

In accord with the custom of numerous prestigious conferences, at the end of the first day a vocal-instrumental concerto was presented with the participation of the orchestra of the Chopin Baltic Philharmonic Orchestra under the management of P. Fiugajski. A young mezzo-soprano Karolina Maria Sikora, the winner of many prestigious vocal competitions at home and abroad, presented an interesting vocal program. It seemed that the New Auditorium of the Gdansk University of Technology is a room highly appropriate (acoustics) not only for didactics, but also for a pleasant philharmonic concert, particularly at the end of first, arduous day of the conference.

Photo 3. Vocal-instrumental concerto with the participation of the orchestra of the Chopin Baltic Philharmonic Orchestra, P. Fiugajski (conductor) and K. M. Sikora (mezzo-soprano) at the New Auditorium of the Gdansk University of Technology, see also www.11bc.pg.gda.pl. Photo Dr. R. Ossowski

Beside the scientific program participants had an opportunity to make themselves acquainted with the rich offer of exhibitors, representing different businesses of the building industry. Representatives of construction companies had the opportunity for direct presentation of the newest technologies to the conference participants, which resulted in new contacts and creative ideas for further cooperation and advancement of the technology. Over 200m^2 of exhibition space was made available to 26 exhibitors. The conference participants showed great interest in the exhibition, which pleased not only the organizers, but above all the exhibitors, because many discussions transformed into agreements about close cooperation.

With great interest were met the next two conference events, the banquet at the restaurant of the Hotel Mercure Hevelius in Gdansk (with the participation of all conference attendees and persons accompanying them at the cost of the organizers), and the technical trip on a "pirate" ship on the closing day of the conference down the Motlawa river to the Bay of Gdansk in the direction of the Deep Water *Container Terminal* (DCT) Gdansk than to the wooden pier in Sopot. Historic and newly created solutions and structures of bedding of harbour installations were shown to participants.

News

Photo. 4. Group of the conference participants after leaving the “pirate” ship (in the background) at the pier in Sopot, see also www.11bc.pg.gda.pl. Photo Dr. R. Ossowski

The 11th Geotechnical Conference of the Baltic Countries could not end with such a success, if not for the understanding and generosity of the industry. The Organizing Committee wants to express its gratitude to the companies sponsoring the conference – without their participation the organization of this important for the region scientific event would not be possible.

Interested persons are invited to visit the website: www.11bc.pg.gda.pl, where the unabridged information about the conference is provided, together with information about the sponsoring companies, and information on how to purchase conference materials with the full text of the published papers (versions *.pdf).

Reported by Prof. Z. Sikora

Event Diary

ISSMGE SPONSORED EVENTS 2009

III Latin American Conference of Young Geotechnical Engineers
Date: 30 March - 1 April 2009
Location: Cordoba, Argentina
E-mail: 3cligj@efn.uncor.edu

ISSMGE TC18 - International Conference on Deep Foundations - CPRF and Energy Piles
Date: 15 May 2009
Location: Airport Conference Centre, Frankfurt, Germany
E-mail: sekretariat@getoechnik.tuk-darmstadt.de

International Symposium on Prediction and Simulation Methods for Geohazard Mitigation
Date: 25 - 27 May 2009
Location: Kyoto Internat. Conference Ctr, Kyoto, Japan
Contact person: Prof. F. Oka
E-mail: foka@mbox.kudpc.kyoto-u.ac.jp
Website: nakisuna2.kuciv.kyoto-u.ac.jp/tc34/is-kyoto/

IS-Tokyo 2009 - International Conference on Performance-Based Design in Earthquake Geotechnical Engineering - from case history to practice
Date: 15 - 17 June 2009
Contact person: Dr Y Tsukamoto (ytsoil@rs.noda.tus.ac.jp)
Website: www.rs.noda.tus.ac.jp/ytsoil/IS2009.htm

The 3rd International Geotechnical Symposium (IGS2009) on Geotechnical Engineering for Disaster Prevention and Reduction (22-25 July)
Date: 22 - 25 July 2009
Location: Harbin, China
Contact person: Professor MC Zhao,
E-mail: maocai@mail.ru, zhao_maocai@sohu.com
Website: igs2009.hit.edu.cn

4 iYGEC'09 - 4th International Young Geotechnical Engineers' Conference
Date: 2 - 6 October 2009
Location: El-Mahrousa Hotel, Alexandria, Egypt
Contact person: Prof. Fatma Baligh (baligh11@hotmail.com)
E-mail: iygec2009@hamza.org

XVII International Conference for Soil Mechanics and Geotechnical Engineering
Date: 5 - 9 October 2009
Location: Bibliotheca Alexandrina, Alexandria, Egypt
Website: www.2009icsmge-egypt.org/

NON-ISSMGE SPONSORED EVENTS 2008

GEOAGE - Advances in Geotechnical Engineering - IGC 2008
Date: 17 - 19 December 2008
Location: Bangalore, India
Contact person: Prof. TG Sitharam
(igc2008@civil.iisc.ernet.in)
Website: civil.iisc.ernet.in/~igc 2008

2009

IFCEE 09: ASCE FOUNDATIONS GeoCongress with ADSC & PDCA
Date: 15 - 19 March 2009
Organizer: GeoInstitute of ASCE
Contact person: Paul W. Mayne (paul.mayne@ce.gatech.edu)
Website: www.ifcee09.org

Second International Conference on New Developments in Soil Mechanics and Geotechnical Engineering
Date: 28 - 30 May 2009
Location: Nicosia, Northern Cyprus
Contact person: Cavit Atalar
E-mail: zm2009@neu.edu.tr; catalar@neu.edu.tr
Website: http://zm2009.neu.edu.tr

The 2nd International Seminar on Earthworks in Europe
Date: 3 – 4 June 2009
Location: Royal Geographical Society, London, UK
Contact person: Mrs Tracey Radford
Email: tracey.radford@atkinsglobal.com
Website:http://www.geolsoc.org.uk/gsl/groups/specialist/engineering/page4425.html

GeoHunan International Conference: Challenges and Recent Advances in Pavement Technologies and Transportation Geotechnics
Date: 3 - 6 August 2009
Contact person: Dar Hao Chen, PhD, PE
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International Symposium on Ground Improvement Technologies and Case Histories
Date: 9 - 11 December 2009
Location: Singapore
E-mail: ISGI09@nus.edu.sg
Website: www.geoss.sg/ISGI09

Editorial Remarks

The editorial board is pleased to send the ISSMGE members ISSMGE Bulletin Vol.2, Issue 4 in December 2008, which includes a message from the Vice President, case history, regional conference report and activities. Contributions from member society is very much welcome. Any comments to improve the Bulletin are also welcomes. Please contact a member of editorial board or Vice-President for the region, or directly e-mail to Osamu Kusakabe (kusakabe@cv.titech.ac.jp).

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