# ISSMGE Bulletin

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## A Message from the Vice President

By Professor Roger Frank

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To write any kind of 'comprehensive' or 'unified' view about Europe is always a difficult task. At least we, geotechnical engineers members of ISSMGE, do not have the same problems as many of our politicians who spend (too) much time and effort in defining what exactly the borders of Europe are... Indeed, for ISSMGE, the situation is very clear: the European region of ISSMGE comprises 35 Member Societies (representing 36 countries, as there is one single Member Society for both the Czech Republic and Slovakia). The 35<sup>th</sup> Member Society to join ISSMGE was Georgia (in 2007). The total of individual members is now around 7900. Thus, Europe is not far from representing 45% of ISSMGE!

The activities concerning geotechnical engineering on the European continent may differ strongly when moving from one country to the other. This is not only due to the fact that the economic situations and, in particular, the construction sector can vary a lot, even inside the zone using the single currency, i.e. the Euro, but also due to the varying geological and geotechnical conditions throughout the continent. Some countries, or some of their areas, need an important geotechnical 'input' into the projects as, in some other countries or areas, the 'effort' can be more limited, due to simpler or better known ground conditions. Not even speaking of the various procedures, legal requirements, available codes or standards, etc. for geotechnical studies which are markedly different...

In this context, it is interesting to repeat, here, the great progress made with the publication of Eurocode 7 on Geotechnical design (2004), which will become, in principle, a mandatory standard by year 2010 (for the countries members of CEN, the European Committee for Standardization, i.e. 30 countries, at this moment). But, again, the legal force of a standard varies from one country to the other; in some countries the standards for construction are part of the law as, in some other countries, geotechnical engineers may just simply refer or not refer to them... Eurocode 7 is not either a more or less rigid set of geotechnical rules and models; it is a kind of umbrella code for geotechnical design under which national provisions or standards will have to be written or adapted to (the other European norms for geotechnical practice, dealing with ground investigation and testing, as well as those dealing with the execution of geotechnical works, also have to comply with Eurocode 7). What has really been achieved with Eurocode 7 is the establishment of a tool for the geotechnical designers to speak the same language and also a tool for the necessary dialogue between the geotechnical engineers and the structural engineers.

The geotechnical activities on the continent linked to ISSMGE are numerous and of varied nature. Many Member Societies organise, on more or less regular bases, National Conferences and events (dedicated Lectures, Memorial Sessions, etc.). In some countries, not necessarily large countries, there are up to two or three regular events per year. The National Conferences, in which I have had the pleasure to participate (unfortunately, it is clearly impossible for a VP for Europe to attend all major national events!), always had a surprisingly large number of participants, showing a high level of activity in the given country, as well a great interest for the geotechnical world by other construction engineers, not necessarily directly involved in the geotechnical activities. It is to be mentioned that the XI Portuguese National Conference took place in Coimbra, in April 2008, together with the IV Luso-Brazilian Conference. It was the occasion for Professor John Burland to deliver the 1st Victor de Mello Lecture. The subject was: "Reflections on Victor de Mello, friend, engineer and philosopher". Victor de Mello was President of ISSMGE from 1981 to 1985.

Another important set of events are, of course, the regional Conferences on geotechnical engineering, namely the Baltic Sea Conference, the Danube Conference, the European Young Geotechnical Engineers' and the European Conference SMGE. Like for all the continents, the last ECSMGE was organised in 2007. It took place in Madrid, in September 2007, organised by the Sociedad Española de Mecánica del Suelo e Ingeniería Geotécnica. I have already had the pleasure to report in ISSMGE Bulletin about the Madrid XIV ECSMGE. It was a great success with more than 800 participants,

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## A Message from the Vice President (continued)

By Professor Roger Frank

from 34 European countries and from 15 countries of other continents. The XV ECSMGE will take place in Athens (in 2011) and I do hope that there will also be many delegates coming from other continents.

The Baltic Sea and the Danube Conferences are also organised on a 4-year basis. The Baltic Sea Conference follows the ECSMGE; thus the XI Baltic Sea Conference will take place in Gdańsk, in September 2008, organised by the Polish Committee on Geotechnics.10 countries around the Baltic Sea are now directly involved in this event. The theme will be 'Geotechnics in maritime engineering'. The Danube Conference takes place the year before the ECSMGE. The XIII edition took place in Ljubljana in 2006 organised by the Slovenian Geotechnical Society. The XIV Danube Conference will take place in Bratislava in 2010, organised by the Czech and Slovak Committee, with the theme 'From research to design in European practice'. The Danube Conferences involve directly more than 10 countries linked to the Danube River or its tributaries. With ICSMGE (Osaka, in 2005; Alexandria in 2009), it can be said that the European geotechnical engineers are offered every year the possibility to participate in a major international event organised under the auspices of ISSMGE!

Many other international events linked to ISSMGE took place recently or will take place soon in Europe. Let me mention, e.g. the 4th International Conference Earthquake Geotechnical Engineering (4thICEGE), Thessaloniki, Greece, June 2007, the First International Conference on Education and Training in Geo-Engineering Sciences (1<sup>st</sup> ICETGES) held in Constantza, Romania, in June 2008 and the International Geotechnical Conference on 'Development of urban areas and geotechnical engineering' to be held in St. Petersburg, Russia, also in June 2008.

Except for the year of ICSMGE, there is a Young Geotechnical Engineers' Conference every year in Europe. The 18<sup>th</sup> EYGEC took place in Ancona, Italy, in June 2007. The next 19<sup>th</sup> EYGEC will take place in Györ, Hungary, in September 2008. Two ISSMGE International Seminars (formerly called 'Touring Lectures')" were organised in Europe in 2008, one in Cavtat, Croatia, and one in Tirana, Albania. In February 2009, an ISSMGE International Seminar on 'Foundations in Cities with Difficult Soil Conditions' will take place in Budapest, Hungary.

Finally, last but not least, there are five Technical Committees active in Europe. These are: ETC 3 on "Piles foundations", ETC 7 on "Numerical methods in geotechnical engineering", ETC 10 on the "Evaluation of Eurocode 7", ETC 12 on the "Evaluation of Eurocode 8" and ETC 16 on "Education and Training in Geotechnical Engineering".

European geotechnical engineers are, of course, very linked to the activities on the other continents. A good number of European members of ISSMGE thus participated in the XIV African Regional Conference on Soil Mechanics and Geotechnical Engineering held in Yaoundé, Cameroon, in November 2007. The participation in the XVII ICSMGE in Alexandria, Egypt, in October 2009, is expected to be very strong. Rendez-vous next year, in Alexandria!

# Reminiscences Professor Andrew Schofield

Interviewer: Professor Kenichi Soga, University of Cambridge

Date: January 24, 2008

Place: Engineering Department, University of Cambridge

KS: Andrew, after you graduated what did you do?

AS: Prof. J. F. Baker suggested I see London consultant engineers Scott and Wilson (SW), where his former pupil Henry Grace worked. I thought I might work on concrete shell design but I was interviewed by Guthlac Wilson and offered work as a junior engineer in Nyasaland (now Malawi) where Henry Grace was the local partner, and I accepted. On leaving the interview I asked his secretary where Nyasaland was! Henry Grace had been at Harvard and a graduate pupil of Casagrande before WWII, in which he served in airfield construction. He was an excellent engineer to work for. Clayey laterite had been used as pavement material for Cheleka airfield. There were failures and he wanted to see how Lime stabilisation could improve the bearing capacity of future pavements. He asked me to perform California Bearing Ratio tests on lime and cement stabilised Laterite in the SW soil mechanics laboratory, and then set me to find from air photos, sources of clayey laterite for use in low cost road pavements. I constructed trial pavements and prepared the Specifications and Bills of Quantities for contracts for lengths of road to be constructed in the Nyasaland Protectorate in 1954.



- KS: After this, you decided to do your PhD or did somebody else ask you to do a PhD?
- AS: Ken Roscoe had lectured to me in soil mechanics and was then beginning research. He wrote to me from Cambridge inviting me to return from Nyasaland to be his first research student. When I came back he got me to write up my road work as an essay for the Cambridge University 'John Winbolt' Prize; I won that prize and then rewrote the essay as three 1957 Colonial Road Notes for the UK Road Research Laboratory, which then won ICE Miller Prizes.
- KS: How did your PhD research topic come up?
- AS: Roscoe offered me two topics; he wanted one student to get data with his simple shear apparatus and another student to collaborate with Prof. Baker's structures group in short pier foundation design to provide moment fixity for the stanchions of welded mild steel frames. Moment fixity at each base would make the best use of the steel in the welded frame. A horizontal force at the base would be carried by a concrete floor slab, but the full plastic moment at the base must be resisted with the moment fixity of a short pier. I chose the collaboration with Baker's group and began my study of earth pressures. In my PhD experiments I measured the development of lateral earth pressure on a plate with an axis of rotation at the surface of sand in a test tank.
- KS: During this work you became very interested in plasticity and I guess this led to Cam Clay?
- AS: Yes, I read everything I could about plasticity and was impressed with what I found in the Russian literature. I only had enough Russian to be able to read one word after another in journals in the University Library with a dictionary. I later managed to get some funding to get the books translated. But theory of plasticity did not fit test data of soil strength. I asked Roscoe for help and he gave me his translation of Hvorslev's PhD thesis from the German into English (as a prisoner of war throughout WWII he knew German and he later insisted that all research students read it). Hvorslev's equation led me to make what is now called Hvorslev's surface, bending copper wire into a sloping surface, with a curved line edge; it seemed to me that as test paths progressed each must arrive eventually at this edge, the Critical State (CS) Line. That was the beginning of CS discussions with Roscoe. His simple shear apparatus was designed to study the changes of volume of soil in test paths. By this time a second research student had arrived, Peter Wroth. He had no Civil Engineering experience, having been an artillery officer in military service, and had difficulty in getting Roscoe's simple shear apparatus (SSA) to work because it had a basic flaw. The specimen had upper and the lower rough surfaces with equal and opposite shear stresses. For a uniform state the soil needed complimentary shear stresses on the vertical ends. In order to allow the soil to dilate had used lubricated rubber sheets to eliminate shear on the rotating end flaps. The stresses in the interior sample could never be uniform, making endless difficulty with the SSA apparatus. A change came. Prof. Baker advertised a post for a Demonstrator to work with Roscoe and begin the Cambridge Soils Group. Both Peter Wroth and I applied and were interviewed. Having worked with SW in Africa I was appointed, but Roscoe hoped that Peter Wroth would finish his PhD thesis, get industrial experience, and then return to the Group.

# Reminiscences (continued) Professor Andrew Schofield

- KS: Then you did triaxial testing with Thurairajah, rather than simple shear tests.
- AS: Yes. At that time Imperial College began publishing Geotechnique papers about the pore pressure development in clay. Casagrande's original paper on critical void ratios was concerned with liquefaction and with the prediction of the pore pressure in sand that was unable to change its volume during rapid shear at constant volume. His paper to the Boston Civil Engineers showed a way to find the pore pressure, assuming a critical void ratio with a constant value. However the work of Hvorslev and the Imperial College data showed that the CS varied with the effective pressure. We needed test data of soil on the 'wet' side of the CS to study the change of volume or of pore pressure. Roscoe wanted this to happen in his SSA but drainage from clay means that each test takes a long time. Peter Wroth could test sand quite quickly but there was no chance of quick SSA on clay. So Roscoe took Peter Wroth up to Imperial College and asked Prof. Skempton for access to the PhD theses that were the basis of the new Geotechnique papers. Skempton was very confident of the excellence of Imperial College and let Roscoe and Wroth take the theses to Cambridge. I had analysed the Geotechnique papers and now Peter Wroth as the research student could study the theses in detail. By early 1957 he had new test path data on the wet side of CS. It was an exciting year because of the London Conference of the International Society in which Skempton played a very prominent role. Our Group was not ready to make a contribution but we discussed what we should do with the new CS line. Slides were made showing what we had found with drained or undrained test paths approaching a CS line from 'wet' or 'dry' sides. Roscoe went up to the conference in London with this box of slides in his pocket so that he could get up and show them if needed. Nobody said anything about pore pressures or our CS stuff and he came back from London saying we were far ahead of everyone else, with 10 years in which to get good data from the SSA I decided to begin triaxial testing. Then in November 1957 David Henkel stood up at a meeting at the Institution of Civil Engineers and began to suggest the same sort of CS idea as ours. Peter Wroth sitting one side of Roscoe and I on the other side both nudged him with our elbows and said 'unless you get up and say something now we will lose all our work'. Roscoe stood up and said 'we are preparing a paper on this in Cambridge for submission to Geotechnique'. Dr. Cooling, Editor of Geotechnique, told Roscoe that if we put our paper in quickly it would be published, so we quickly wrote our paper. When it reached Cooling he sent it for review at Imperial College by David Henkel who saw that his student's PhD data had been interpreted and he had got no credit for the work they had done, and asked Skempton to ask how it had happened. I believe Roscoe told Cooling that unless Geotechnique published our paper immediately he would send it to the ASCE Journal. Our paper, only written just before Christmas, was published in the March 1958 issue of the Geotechnique.
- KS: So Andrew, this present year 2008 is the 50<sup>th</sup> anniversary of the Sputnik paper in Geotechnique that launched the Cambridge Soils Group on the international stage.
- AS: After 1958 Cambridge had plenty of good applications from well trained students and got UK Science Research Council grants.
- KS: And this led to Cam Clay model?
- AS: Well, it led to the student, Thurairajah, from Ceylon. There were quite a number of small problems in the 1958 paper but one difficulty was that peak strength in a drained test and in undrained test fitted the same Hvorslev's surface. This meant that no plastic work is dissipated in volume change. We needed Thurairajah to check this with next research student making careful calculations for every step in his triaxial tests. He came up with a remarkable dissipation function; the energy dissipated by aggregated soil grains depends only on shear distortion and not on the volume change. It was a striking finding but not what you might expect by thinking about micro mechanics. However, at that time Calladine, a former undergraduate at Cambridge who had gone to work at Brown University with Drucker, came back to Cambridge he wanted to see and to interpret Roscoe's data (much as Roscoe's student had interpreted David Henkel's data) but Roscoe refused. I realised that I could combine Thurairajah's dissipation function and the Associated Flow Rule of Theory of plasticity that Calladine had talked about, to obtain an equation that could be integrated. So Roscoe and I could then publish two papers. One was a Geotechnique paper on the work of Thurairajah (who at that stage had just gone back to Ceylon and had become Professor at the University of Peradeniya). The other was a paper for the European Regional Conference of the International Society in Wisbaden in 1963 that was a purely theoretical paper based on an assumed dissipation function and the plastic normality law.
- KS: At the time of the development, did you predict that Cam Clay would be used so much in the world, especially in computational geomechanics?
- AS: It's hard now to remember how recently the computer has come in. When I was a research student analysing the data of my earth pressure tests, simple calculations were performed on a big sheet of paper with columns and a calculating machine with a handle that was physically rotated to multiply numbers of 5 decimal places. All my graphs resulted from work on these big calculation sheets. There were no electronic calculators at that time. The computers which were coming into existence were being used in analyses of structures for study of deterioration of stiffness with deflections and the onset of the instability in columns under compression. No computers had software such as they have now.

# Reminiscences (continued) Professor Andrew Schofield

What was clear to me was that the CS concept would apply widely in practice. In 1958 immediately after our publication, I visited the Swedish Geotechnical Society in Stockholm and then Gothenburg where failures of the quays had been discussed in a Geotechnique paper. I saw that the large movements of the soft post glacial clay must have generated excess pore pressures. After the failure the harbour was reconstructed and new work built over damaged ground it would show excessive settlements in the regions which had sheared. The crane rails for handling goods on the quay side had had to be continuously levelled; the harbour engineer pulled out the settlement records of the quays and I could see that big dips in the settlement records coincided with the locations where the slides taken place, as predicted.

- KS: Another significant achievement you have made is in geotechnical centrifuge testing. So can you tell me what led you to start centrifuge testing?
- AS: While reading the Earth Pressure book of V.V. Sokolovski, I found a footnote about 'the well known modelling method of G.I. Pokrovski'. I followed it up and found several English language publications. A paper at the Harvard Conference of 1937, and also one or two papers in an English language journal called Technical Physics of the Soviet Union. The technology was sound and the ideas fitted in well with critical state soil mechanics, but I felt there must be something wrong, or the Russians would have published more. I was reluctant to begin work but I got a small modelling apparatus made to fix on to the end of a hydraulic turbine. My first experiment in centrifuge modelling with little specimens about 2" x 2" worked well and I was puzzled as to why G.I. Pokrovski published little work. I delayed making applications for a centrifuge but I got a research grant, and I and a new research student got access to a centrifuge in Luton, once used for a British aerospace program. We made models in Cambridge and drove our models, about a metre in overall external length, to Luton and the research student succeeded in making tests. I introduced the idea of centrifuge modelling at a British Geotechnical Society (BGA) meeting. Others began to take interest, in particular Peter Rowe at Manchester who obtained funding and decided he would have a centrifuge. When my book with Wroth was published in 1968 I was invited to become Professor at UMIST. I made applications for funds for centrifuge modelling in Manchester, and when I went there in January 1969 I built a UMIST centrifuge. Prof. Rowe at that time was a major consultant on dams. He built his centrifuge about a year later, so there were two centrifuges in Manchester.

The next big excitement was in 1973 with the International Conference in Moscow. By that stage, having a lot of evidence from the work we had done in Britain that the technique was very good, I wanted to learn what had happened in Russia. I decided that a good idea would be to display our work in the Moscow conference. A simple way was to hire a commercial exhibition space in which to show our work. I wrote to the Moscow Chamber of Commerce, booked a commercial space and got the English centrifuge modellers (my former students in Cambridge and Rowe and I in Manchester) to prepare displays. We went to Moscow and put up all our photographs. The Russians looked at what we were doing and asked what we were selling. I said we hoped to get research contracts for using the centrifuges. Then the Russians asked if we would agree to exchange information and arranged that at the end of the conference everybody who was interested in centrifuge modelling could have a meeting. G.I. Pokrovski was there, an elderly man who was clearly a very distinguished engineer. When I looked round the Soviet centrifuge centre it was clear that they photographed models with a stationary camera in the wall of the centrifuge pit as they flew past. I realised that the event photographed must be an explosion and the reason that the Soviets did not publish must be that it had become military research. In fact G.I. Pokrovski was a leading scientist on weapons effects concerned with multi-megatons weapons, with the rank of General in the Red Army. All that the Soviets knew about explosions and craters was a military secret.

- KS: I guess that your centrifuge testing concentrated largely on civil engineering applications and that then led to many people working openly on centrifuges.
- AS: Yes, the military secrecy made it essential to have some way to get centrifuges into the public domain where we weren't regarded as being spies and had no problems in travelling or visiting. This became possible at the time of the Stockholm conference at which Victor de Mello was the President. He agreed that there should be a centrifuge committee TC 2.
- KS: This was one of the main reasons for developing at TC 2. The committee became really big now.
- AS: Yes, it turned out in 1973 when we went to Moscow that there were two centrifuge modelling groups in Japan; one at Tokyo Institute of Technology but the first one had been at Osaka City University where Prof. Mikasa was one of the Japanese engineers who had been a WWII aircraft designer and in the demilitarisation program had to move into civil engineering. He had the scientific and technical background to develop his own very special centrifuge and original modelling techniques.
- KS: I would like now to hear from you about the future of the geotechnical engineering. What do you think first in terms of ISSMGE, what is the future of this society, do you have any thoughts?
- AS: I do not think that international cooperation is as good as it should be. It was very striking in the time that I was a research student that Terzaghi was contemptuous of Russian engineering and simply didn't respect any Russian work. His dismissal of G.I. Pokrovski's paper was contemptuous. I hope that ISSMGE can get full collaboration both with the Chinese and the Russian research establishments. The next generation of young Western engineers should be familiar both with clever Russian and with clever Chinese engineers.

# Reminiscences (continued) Professor Andrew Schofield

KS: To these young geotechnical engineers and academics, what technology fields in geotechnical engineering are mostly needed at present in your opinion?



AS: I'm struck by the fact that the soil mechanics in Terzaghi and Peck's text book is about the post glacial deposits of Northern Europe and the Northern United States. I saw soils in Africa that were transported to form a catenary from the top of mountains down the slopes to the valley bottom. The soil sequences that developed involve chemical transport as much as the physical transport of grains. CS soil mechanics is about aggregate of grains and has not developed a place in it for the pore water and soil surface chemistry. For soils of central Russia or China or South East Asia, like their Laterites, it is not clear that CS soil mechanics and Casagrande's soil classification techniques are the right starting point. It is clear that Coulomb's equation is not the best starting point. We have a major problem in Europe because we already know that the Mohr-Coulomb equation is wrong but Eurocodes are being rolled out in industry with no rational discussion of Mohr-Coulomb's equation and cohesion and friction. I have made a beginning with my 2005 book with Thomas Telford Limited. The International Society needs to be able to revise the mechanics of soils; not simply micro mechanics but including the transport of the chemical nature and thermal effects in soils. As far as I can see much has to begin again.

KS: Thank you Andrew, it looks as though there is a great future in Soil Mechanics and our horizons will continue to expand. So lastly, would you please say a word to the members of the International Society?

AS: Well, my experience of soil mechanics has been that the International Society has played the central role in providing the academic freedom for discussions, publications and contacts. Terzaghi played a vital role in setting up the whole system and creating many opportunities. It is as important today that the International Society has many forums in which young people and older people can discuss their work and can publish as it was 50 years ago in 1957 - 1958 when many scientists came to the 1957 London conference. Whatever enables engineers to get funds, make experiments and discuss them internationally is a very desirable thing. The development of new theories that can lead to new teaching in geotechnical engineering gives the ISSMGE new opportunities.

KS: Thank you Andrew for your insightful thoughts.

Acknowledgements: We would like to thank Amanda Pyatt and Chang-Shin Gue for their help on editing this interview material.

The Personal History of Professor Andrew N. Schofield (MA, PhD (Cantab); FRS 1992; FREng, FICE)

Born 1 Nov. 1930, Professor of Engineering, Cambridge University, 1974-98, now Professor Emeritus; Fellow of Churchill College, Cambridge, 1963-66 and since 1974

EDUCATION: Mill Hill Sch.; Christ's Coll., Cambridge

CAREER: John Winbolt Prize, 1954. Asst Engr, in Malawi, with Scott Wilson Kirkpatrick and Partners, 1951. Cambridge Univ.: Demonstrator, 1955, Lectr, 1959, Dept of Engrg. Research Fellow, California Inst. of Technology, 1963-64. Univ. of Manchester Inst. of Science and Technology: Prof. of Civil Engrg, 1968; Head of Dept of Civil and Structural Engrg, 1973. Chm., Andrew N. Schofield & Associates Ltd, 1984-2000. Rankine Lecture, ICE British Geotechnical Soc., 1980. Chm., Tech. Cttee on Centrifuge Testing, Int. Soc. for Soil Mech. and Foundn Engrg, 1982-85. FREng (FEng 1986). James Alfred Ewing Medal, ICE, 1993. US Army Award, Civilian Service 1979

PUBLICATIONS: (with C. P. Wroth) Critical State Soil Mechanics, 1968; (ed with W. H. Craig and R. G. James and contrib.) Centrifuges in Soil Mechanics, 1988; (ed with J. R. Gronow and R. K. Jain and contrib.) Land Disposal of Hazardous Waste, 1988; Disturbed Soil Properties and Geotechnical Design, 2005; papers on soil mechanics and civil engrg

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# **TC Activity**

## TC 33: Geotechnics of Soil Erosion



Committee members at Amsterdam TC-33 meeting

Chairman and Host Society: Prof. Jean-Louis Briaud (USA) and Secretary: Dr. Michael Heibaum (Germany)

#### Terms of reference

- a. The erosion-advanced organizations (academia, government, private firms) in selected countries share their knowledge on Geotechnics of Soil Erosion including practice and applied engineering research with other countries interested in the topic.
- b. Exchanges take place on the international research progress.
- c. Global guidelines are developed.
- d. A web site is developed.

#### Activities

TC33 has been in existence since 1997 when it was created by President Ishihara as the Scour of Foundations Committee. In 2001, it was renewed by President Van Impe as the Geotechnics of Soil Erosion Committee. In 2005, it was renewed by President Seco E. Pinto as the Geotechnics of Soil Erosion. The activities of our committee have included the following:

- 2000 International Symposium on Scour of Foundations was organized by Professor Jean-Louis Briaud on behalf of TC33 in Melbourne, Australia on November 19, 2000.
- 2001 Istanbul Workshop on Scour of Foundations at ICSMGE. This took place at the ICSMGE in Istanbul. Dr. Michael Heibaum from Germany chaired that event.
- 2002 First International Conference on Scour of Foundations at Texas A&M University, USA. Professor Jean-Louis Briaud chaired the conference.
- Meeting of TC33 at Texas A&M University Minutes of this November 2002 meeting can be found on the web site.
- Meeting of TC33 in Cambridge, Massachusetts, at the Pan American Conference June 23, 2003 from 7:30 to 10:00 pm.
- 2004 Second International Conference on Scour and Erosion in Singapore. Professor Yee-Meng Chiew of Singapore chaired the conference.
- Meeting of TC33 in Singapore Minutes of this November 2004 meeting can be found on the web site.
- 2006 Third International Conference on Scour and Erosion in Amsterdam. Dr. Gijs Hoffmans of Netherlands chaired the conference.
- Meeting of TC33 in Amsterdam Minutes of this November 2006 meeting can be found on the web site. At this meeting the 2008 ICSE-4 was awarded to Japan (Tokyo) and the 2010 ICSE-5 was awarded to USA (San Francisco). This contributes to all terms of reference.
- 2008 Fourth International Conference on Scour and Erosion will take place in Tokyo, Japan on November 5-7, 2008. Professor Hideo Sekiguchi is the chair of ICSE-4. See this web site for details (http://icse-4.kz.tsukuba.ac.jp/index-e.html). You can reach Professor Sekiguchi at sekiguch@ujigawa.mbox.media.kyoto-u.ac.jp. The ISSMGE TC33 will meet in the afternoon of November 4<sup>th</sup> just before the conference.
- 2010 Fifth International Conference on Scour and Erosion will take place in November 2010 in San Francisco, USA. Mrs. Cathy Avila and Ms. Beatrice Hunt are the Co-Chair of ICSE-5.
- The web site at http://ceprofs.civil.tamu.edu/briaud/Scour-tc33.
- Short courses: TC33 in partnership with other committees has organized a number of short courses in
  - 1. USA. November 2002 at Texas A&M University, Bridge Scour.
  - 2. Canada, April 2003 in Toronto, Bridge Scour
  - 3. Tunisia (in French), February 2004 in Hammamet, Bridge Scour
  - 4. Portugal, June 2004 in Braga, Bridge Scour
  - 5. USA, January 2005 in Austin, Surface Erosion
  - 6. USA, February 2006 in Atlanta, Bridge Scour
  - 7. USA, February 2007 in Denver, Levee and Dam Erosion
  - . Spain (partially in Spanish), April 2007, Bridge Scour

#### Future work

Our series of ICSE conferences (2002, 2004, 2006, 2008, 2010) every two years represents a very good incentive for us to meet regularly. They attract the best experts in the field. Typically 25 countries are represented and some 100 presentations are made. The ICSE conference proceedings also document the latest in the scour and erosion world. They provide information for many countries which may not be fortunate enough to be able to attend the conferences. The ICSE conferences are the highlights of our committee activities and we plan to continue to organize these conferences.

# **TC Activity**

## TC 16: In-Situ Testing

Chairman: Prof. Paul Mayne (USA) and Secretary: John Powell (UK)

All activities and information concerning our TC 16 regarding our mission, meetings, and members may be found at our website: www.geoforum.com/tc16

- 1. We held a general meeting and technical TC 16 workshop on pressuremeters during the XIV European Conference on Soil Mechanics & Geotechnical Engineering in Sept. 2007 in Madrid. This was well attended with approximately 18 members at the general meeting and 45 at the PMT workshop. At the courtesy of the ECSMGE organizers, box lunch was provided to those who attended.
- 2. The Third International Conference on Site Characterization (ISC-3) was successfully held in Taipei, Taiwan from April 01-04, 2008. Our gracious organizer and host was Professor An-Bin Huang of National Chiao Tung University. The ISC-3 represents a continuation of a list of prior momentous events on various aspects of geotechnical site characterization that can be traced back to the ISC-1 (Atlanta 1998) and ISC-2 (Porto 2004). The idea and theme for these ISC series were initiated under the auspices of TC 16 Ground Property Characterization by In-Situ Tests of the ISSMGE.



TC 16 Core Committee Members and Friends at Banquet One during ISC-3

A diverse and international group of around 430 researchers, practitioners, and academicians from over 40 countries gathered at the Taipei International Convention Center (TICC) to exchange their experiences and findings on site investigation methods and testing. [Note: the TICC is one block away from Taipei 101 - currently the tallest building in the world]. At the ISC-3, creative and novel ideas in the use and development of sampling of soils and rocks, geophysical techniques, and in-situ testing were discussed and presented. Topics on in-situ field methods included the cone penetrometer, piezocone, standard penetration testing, flat dilatometer, pressuremeter, and vane shear devices, as well as hybrids such as the seismic piezocone test and seismic dilatometer. Papers presented at ISC-3 revealed some of the remarkable developments in geophysical field mapping and imaging techniques that enable nondestructive profiling of underground conditions. A rise in the utilization of risk management, probability, and statistics in geotechnical site characterization was clearly evident. Particular useful applications include the evaluation and assessment of natural hazards including earthquakes, tsunamis, and hurricane/typhoon related-events.

The conference proceedings include some 207 papers that include 12 keynote lectures. The special series of James K. Mitchell Lectures has continued here with the 2008-issue delivered by Professor Dick Campanella (JKM's first PhD student). The proceedings are entitled *Geotechnical & Geophysical Site Characterization* that have been produced with the keynotes in hard copy volume and all papers on an electronic CD rom published by Taylor & Francis Group, London. The conference was organized around seven themes including: Case histories in field applications; Characterization of unusual/unsaturated geomaterials; Development of new equipment & methods; Geophysical testing and imaging techniques; Interpretation and analysis of test data; Pavement geomechanics; and Sampling disturbance.

The conference was given organizational and/or financial support from the National Science Council of Taiwan, Ministry of Economic Affairs of Taiwan, National Chiao Tung University, and the Southeast Asian Geotechnical Society. During the conference, social events included a welcome reception, two separate seated banquets, and local sight-seeing tours of the city and county of Taipei. During the conference, the members of TC 16 held a lunchtime meeting to discuss the prospects and organization of the next event (ISC-4) with a standing proposal to be submitted by Prof. Roberto Coutinho and the Brazilian Society. Of final note, some of the ISSMGE officers who attended the ISC-3 include President Pedro Sêco e Pinto, Past President Kenji Ishihara, Past President Mike Jamiolkowski, and Vice President M.R. Madhav.

- 3. We are now in the planning stages of the 4th ISC and have now received a proposal to host this event from Professor Roberto Quental Coutinho (Universidade Federal de Pernambuco) and Professor Alberto Sayão (President ABMS Brazilian Geotechnical Society). At this time, the tentative proposal is to have the ISC-4 in the city of Recife in April 2012.
- 4. During 2007, we finished preparing the revised ASTM Standard D 5778 on the Cone Penetration Test that was balloted and finally approved for publication in Dec. 2007.
- 5. Members of our group also completed the final report for the Synthesis on Cone Penetration Testing under the National Cooperative Highway Research Program (NCHRP 368) for the Transportation Research Board. This was published in October 2007 by the National Academies Press and is available online at: www.trb.org
- 6. We are currently planning TC 16-related activities for the upcoming ASCE GeoCongress that will be held in Orlando in March 2009. This will be a special joint international conference by the ASCE Geo-Institute, International Association of Foundation Drilling (ADSC), and the Pile Driving Contractors Association (PDCA). The event is entitled the International Foundation Conference and Equipment Expo (IFCEE'09). The TC16 has proposed to host special sessions related to the use of in-situ testing in the evaluation of deep foundation systems. Details can be found at: http://www.ifcee09.org/

## **TC Activity**

## **TC 17: Ground Improvement**

Chairman: Serge Varaksin (France) and Co-chairman: Jan Maertens (Belgium)



TC meeting - Kuala Lumpur, Malaysia

The Technical Committee 17 (TC17) has moved forward in the last years. This international committee was created many years ago to progress in a vital field "how to build on soils encountering worse and worse conditions".

Previous activities have taken place at the satellite congress in Istanbul in 2001, during the XIVth CIMSG, the European congress in Prague in 2003 and the Symposium ASEP-GI in Paris in September 2004. The CFMS (French Soil Mechanics Society) is hosting this TC and has given for the present four year term the chairmanship to S. Varaksin, associated to Professor Jan Maertens (GBMS) and Noel Huybrechts of the Belgian Building and Research Institute, was nominated as secretary.

This new team has formed working groups related to different fields under the close advice of permanent core members and taken care of an equilibrated participation of most continents as far as permanent members are concerned.

Furthermore, consultants, industry, and practitioners have been selected in various countries. The working groups (W.G) were formed with following categories:

W.G. A: Concept and Design, W.G. B: Ground Improvement without admixtures in non cohesive soils, W.G. C: Ground Improvement without admixtures in non cohesive soils, W.G. D: Ground Improvement with admixtures, W.G. E: Ground Improvement with grouting type admixtures, W.G. F: Earth reinforcement in Fill and W.G. G: Earth Reinforcement in Cut.

The working groups F and G are actually under the TC 9 hosted by the TC 17. Each working group through its coordinator has been requested to prepare a brief description and summary list of recent references related to their theme. Those documents are partially available on the TC 17 Internet site: www.bbri.be/go/tc17 together with key presentations from the TC 17 members at different conferences. Since that, success has not been immediate, how to move various continents at the same time by practitioners in full activity!! But slowly, things are starting to shape up.

The first meeting held at the Graz conference on numerical methods (NUMGE2) was a positive start. It was attended by representatives of 4 continents and 11 countries. The chairman and representatives of Australia, Japan, China, South Africa and Europe would exchange their views and set the basis of the different working groups. Prof. Jan Maertens has represented the TC 17 at the 8<sup>th</sup> Congress on geosynthetics at Yokohama in September 2006 and at the seminar of "Young-ELGIP" in October 2006 at Delft - Netherlands. Serge Varaksin was invited in Budapest for the Szecky Karoly Symphosium" for a key note lecture on his favourite subject "Concept and Parameters". The 16<sup>th</sup> South east Conference "SEAGC" was the opportunity of an active participation of both "Co-Chairman" of the TC 17 and coordinators. Serge Varaksin was invited to present a key note lecture on the subject of challenges in ground improvement techniques for extreme conditions: concept and performance, and to chair a session. A TC meeting was organized during this conference on the subject of progress in the working groups and introduced by President Seco E. Pinto and Dr Ooi teek Aun, President of the Conference.

On the invitation of President Seco E Pinto, the TC 17 represented by Serge Varaksin contributed to a series of lectures called "Touring Lectures" in Hanoi and Ho Chi Minh, Vietnam. Two days of conferences in each city were scheduled attended by more than 350 engineers. Professor Truong Tien Nguyen, President of the Vietnamese Soil Mechanic Society has personally translated most of the presentations. Some subjects on vertical drains, vacuum consolidation, dynamic compaction and replacement could be illustrated by Vietnamese case histories and publications in the lecture's proceedings. The European conference SIMSG in Madrid in 2007 can be remembered as a major progress of the various working groups. Two major events for the life of the TC 17 were planned and turned out to be a success. A full day technical session was attended by up to 80 participants. Professor Schweiger, M. Boussida (WG A), P. Mengé, J. Wehr (WG B). Kirstein, N. Cortlever (WG C), R. Essler, M. Kitazumme, A. Pinto (WG D), M. Chopin, I. Markov (WG E), C. Jenner, J. Sankey (WG F), Turan Durgunoglu (WG G) were provided lectures on their respective themes. Their presentation is available on the TC17 website. The next day, a formal TC 17 meeting was attended by 17 members to review progress of the working groups, define specific guidelines, present the recent web site and set the basis of preparation of the



TC 17 Touring Lectures, Ho Chi Minh City, Vietnam

ICSMGE conference of Alexandria 2009. The theme no 4 of this conference (construction process) will involve the active participation of the TC 17 members and President Seco Pinto has invited Professor Jian Chu, the coordinator of the TC 17 working group C and various members for the preparation of the S.O.A lecture.

Last but not least, the TC 17 website will exhibit the practice of soil improvement in each member's home country, developing interaction between members. Hoping for numerous and active participation in our TC, see you in Alexandria.

## **Activity of Member**

### **Korean Geotechnical Society**

Founded in 1984, the Korean Geotechnical Society (KGS) is a nonprofit organization committed to providing a robust collaboration between research institutions and practicing engineers, establishing guidelines and technical standards, and systematic dissemination of innovative technology into practice in geotechnical engineering. Another important function of KGS is facilitating mutual linkage with various international organizations, enabling members to actively engage in active exchange of information regarding innovative construction technology and research. The organization is now being led by Prof. Song Lee, University of Seoul with five vice presidents and 35 executive board members. As of May 2008, KGS has 6598 individual members with 161 corporate members.

The objectives of the Society are to:

- Promote the research on the theoretical backgrounds and principles of Geotechnical Engineering
- · Provide and to share the knowledge and achievements through research studies on Geotechnical Engineering
- Promote the collection of data and to enhance the exchange of information between members related to geotechnical engineering
- Provide technical guidelines and expert advice on geotechnical engineering to the Institution, Government, industry and the community
- Provide technical guidelines and expert advice on geotechnical engineering to the Institution, Government, industry and the community

KGS has 14 technical committees, as summarized below, covering all areas in geotechnical engineering. The technical committees are aimed at promoting close collaboration between researchers and practitioners in various fields and disseminating state-of-the-art technology into current practice. Each committee is organized and maintained independently, holding regular seminars and other research activities. In addition, inter-division research seminars and meetings are regularly organized to exchange new ideas.

#### **Technical Committees**

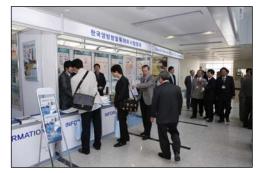
<ul> <li>Foundations</li> </ul>	Slope Stability	Ground vibration
Soft ground improvement	nt Geosynthetics	Information construction
Ground Investigation	Dredging and reclamation	Rock mechanics, Rock Engineering
Deep Excavation	Geoenvironment	Hazard Mitigation
Dam/Embankment		



KGS publishes a monthly technical Journal, ten issues in Korean and two issues in English. The Journal covers all areas related to geotechnical and geoenvironmental engineering, including topics such as foundations, retaining structures, soil dynamics, engineering behavior of soil and rock, site characterization, slope stability, dams, rock engineering, earthquake engineering, environmental engineering, geosynthetics, numerical modeling, groundwater monitoring and restoration. Both theoretical and practice-oriented papers are published, with an emphasis on solutions and case studies which have great potential for improvement of current practice. A monthly magazine is also being published to provide members geotechnical engineering related information.

KGS holds two national level conferences, one each in March and October. The 2008 Spring conference was held at University of Seoul during March 27-28, attracted approximately 600 participants. During the conference two keynote lectures were delivered; one by Prof. Myoung-Mo Kim from Seoul National University and the other by Prof. Mehmet T. Tumay from

Louisiana State University. A total of 170 papers were presented during oral and poster session. A technical exhibition, Geo-Expo, was also held during the conference.



## News

### The 3<sup>rd</sup> International Conference on Site Characterization (ISC3), Taipei 2008



President Pinto delivering a speech at the opening ceremony

The 3rd International Conference on Site Characterization (ISC3) was held at the Taipei International Convention Center in Taipei from April 1-4, 2008. The Conference was sponsored by National Chiao Tung University (NCTU), South East Asian Geotechnical Society (SEAGS) and Taiwan Geotechnical Society (TGS), in collaboration with Technical Committee TC16 on Ground Property Characterization by In-Situ Tests of ISSMGE. A total of 207 papers that include 13 keynote/theme lectures were contributed and published in the proceedings. All papers were reviewed by at least two reviewers assigned by the TC-16 core committee members.

More than 460 participants from 38 countries gathered in the conference to exchange their experiences in all aspects of geotechnical site characterization practice and research. These participants include practitioners, researchers, equipment manufacturers and government officials. Novel ideas in the use and

developments of sampling as well as in situ testing tools such as SPT, CPT, PMT and DMT continued to be the core of the conference. Papers presented at ISC3 revealed some of the remarkable developments in geophysical testing and imaging techniques that enable nondestructive profiling of underground conditions. A rise in the use of risk management and statistical analysis in geotechnical site characterization has also been noticed. Taiwan and some parts of Asia are prone to natural hazards such as earthquakes and typhoons. As a consequence, many papers submitted from this region deals with these concerns as they relate to site characterization.

Four, one-day short courses (CPT/CPTU, DMT, Risk management & site characterization, and Estimation of soil properties for foundation design) offered by leading experts in their respective expertise served as prelude to the conference on April 1. Prof. R.G. Campanella delivered the Third JK Mitchell lecture in the evening of April 1 that followed by an ice breaker. The technical program was initiated following the opening ceremony in the morning of April 2. The oral presentations were divided into 10 sessions distributed throughout the conference, according to their contents. Poster presentations were summarized and discussed by general reporters at the sessions. The technical program adjourned late in the afternoon of April 4, followed by the closing ceremony.



Performance by China Wind at one of the two conference banquets

The TC16 board meeting was held at ISC3 where TC16 chair, Prof. P.W. Mayne

presented a progress report and discussed possible candidacies for the next ISC. A total of eighteen exhibition booths were set up at the conference. The exhibition displayed some of the most advanced in-situ testing equipment, research accomplishments and services available for researchers and practitioners. The proceedings of the conference include a book published by Taylor and Francis (ISBN 978-0-415-46936-4) containing the keynote/theme lectures and a CD-ROM with all 207 papers of the conference. Financial support of ISC'3 provided by the National Science Council, Ministry of Economic Affairs of Taiwan, National Chiao Tung University and other organizations/companies are gratefully acknowledged.

## News

#### The Sixth International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground



The Sixth International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground (IS-Shanghai 2008) was held successfully at Sino-French Centre of Tongji University, Shanghai, China, from 10th to 12th April, 2008. The symposium was organized by Tongji University under the auspices of Technical Committee 28 (TC28) of the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE). It was supported by the Chinese Society of Civil Engineering, the Chinese Society for Rock Mechanics and Engineering, Geotechnical Division of the Hong Kong Institution of Engineers, Hong Kong Geotechnical Society, Hong Kong University of Science and Technology, Shanghai Yangzi Tunnels and Bridge Development Co. Ltd and Shanghai Society of Civil Engineering. This brief summary covers the following four aspects of the Symposium:

#### A. Participants from wide representations

Totally 182 registered delegates from 27 countries and regions attended this symposium. Among them, 88 attendants were from the Chinese Mainland. The delegates are from 92 different institutions and organizations including government departments, construction project owners, scientific research institutions, design and construction companies, consulting engineers and universities.



#### B. Technical and culture exchanges

The Symposium provided various opportunities for academic, technical and culture exchanges. It consisted of special lectures, discussion, oral presentations, poster & exhibition sessions and site visits. There are four special invited theme lectures; six general reports and a special session on Shanghai Yangtze River Tunnel. The four special invited theme lectures were as follows: 1) Overview of Shanghai Yangtze River Tunnel Project presented by Huang Rong (China), 2) Supporting excavations in clay - from analysis to decision-making presented by M.D. Bolton (UK), 3) Processes around a TBM presented by A. Bezuijen (The Netherlands), 4) Underground construction in decomposed residual soils presented by I.M. Lee (South Korea)

The six general reports were listed as follows: 1) Analysis and numerical modeling of deep excavations (by Richard Finno of USA), 2) Construction method, ground treatment, and conditioning for tunneling (by Tadashi Hashimoto of Japan), 3) Case histories (by Alejo Sfriso of Argentina), 4) Safety issues, risk analysis, hazard management and control (by C.T. Chin of Taipei, China), 5) Physical and numerical modeling (by Richard Pang of Hong Kong, China), 6) Calculation and design methods and predictive tools (by Richard Kastner of France). Two symposium proceedings of the Sixth International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground (IS-Shanghai 2008) were published by Taylor & Francis. The titles of the two proceedings are Proceedings of The 6th International Symposium on Geotechnical Aspects of underground Construction in Soft Ground (IS-Shanghai 2008) and The Shanghai Yangtze River Tunnel-Theory, Design and Construction. The former collects one hundred and twelve symposium papers, four special invited lectures and six theme reports while the later includes two special invited reports and more than forty high quality papers reporting the construction and research results of the Shanghai Yangtze River Tunnel.

During the period of the symposium, nine companies exhibited their products, techniques and services, together with their creative ideas in Geotechnical Engineering for the participants and the exhibits provides a good opportunity for the participants to exchange their knowledge and ideas.

#### C. Technical visit

There was a technical visit to Shanghai Yangtze River Tunnel Engineering under construction on the morning on 12 April, which was one of the biggest shield tunnels in the world, diameter 15m and near 9km long.

#### D. On-line Symposium

The entire Symposium was live-transmitted by The China Science-Meeting Online during the symposium to enable students and researchers to watch and listen to the videos on line (www.meeting.edu.cn) at any time.

Reported by Associate Professor Xiongyao Xie, Department of Geotechnical Engineering, Tongji University, Shanghai, China

## News

The First International Conference on Education and Training in Geo-Engineering Science:

Soil Mechanics and Geotechnical Engineering, Engineering Geology, Rock Mechanics

The Romanian Society for Soil Mechanics and Geotechnical Engineering (RSSMGE) organised on 2-4 June 2008 in Constantza the First International Conference on Education and Training in Geo-engineering Sciences: Soil Mechanics and Geotechnical Engineering, Engineering Geology, Rock Mechanics.

JTC3 "Education and Training in Geo-engineering Sciences" of FIGS, chaired by Prof. Luis Gonzalez de Vallejo and ETC16 "Education and Training in Geotechnical Engineering" of ISSMGE, chaired by Prof. lacint Manoliu were involved in the preparation of the Conference.

A number of 120 participants from 6 continents and 23 countries took the opportunity to meet and discuss many challenges faced by the education and training in the field of *Geo-engineering*, defined as "engineering with, on or in geological materials" in a document prepared to set up a cooperation under the auspices of a Federation of International Geo-engineering Societies (FIGS) having ISSMGE, IAEG and ISRM as founding members.

The Conference has been honoured by the presence of Pedro Seco e Pinto - President of ISSMGE, Roger Frank - Vice-president for Europe of ISSMGE, Waldemar Hachich - Vice-president for South America of ISSMGE and of three former Presidents of IAEG: Dr. Niek Rengers, Prof. Ricardo Oliveira and Prof. Paul Marinos. Prof. Giovanni Barla, former Vice-president for Europe of ISRM, represented ISBM

Distinguished personalities of the three Sister Societies have delivered fourteen lectures: John Burland, Ricardo Oliveira, John Atkinson, Mark Jaska, Giovanni Barla, Luis Van Rooy, Niek Rengers, Trevor Orr, Ian May, Luis Gonzales de Vallejo, Keith Turner, Frans Barends, Waldemar Hachich and Mike Devrient. During the six Discussion Sessions a number of 24 papers have been presented by the authors. The Conference Scientific programme included also a Workshop on *the Bologna process and geo-engineering education* under auspices of the project EUCEET (European Civil Engineering Education and Training).

CRC Press/Balkema publishes the Proceedings of the Conference in a volume of 525 pages. Editors are Prof. Iacint Manoliu and Prof. Nicoleta Radulescu.



Prof. Pedro Seco e Pinto addressing the participants of the Conference during the closing session



A group picture taken after the closing session, in front of the hotel Malibu, the venue of the Conference

# **Event Diary**

## **ISSMGE SPONSORED EVENTS** 2008

International Geotechnical Conference "Development of Urban Areas and Geotechnical Engineering"

Date: 16-19 June 2008

Location: Saint Petersburg, Russia

Contact person: Dr. Michael Lisyuk (mbl@georec.spb.ru)

10th International Symposium on Landslides and

**Engineered Slopes** 

Date: 30 June - 4 July 2008 Location: Xi'an, China

Contact person: Zuyu Chen (chenzy@iwhr.com)

Website: www.landslide.iwhr.com

E-UNSAT 2008: First European Conference on Unsatuated

Soils

Date: 2 - 4 July 2008

Location: Durham University, Durham, UK Organizer: Durham & Glasgow Universities

Contact person: Dr Charles Augarde (e-unsat@durham.ac.uk)

Website: www.e-unsat.dur.ac.uk/

South African Young Geotechnical Engineers Conference

Date: 20 - 22 August 2008

Location: Camelot Conference Centre, Durban, Kwazulu-

Natal, South Africa

Organizer: SAICE Geotechnical Division Contact person: Lesley Stephenson

(lstephenson@mweb.co.za)

Website: www.geotechnicaldivision.co.za

1st International Conference on Transportation

Geotechnics

Date: 25 - 27 August 2008 Location: Nottingham, UK

Contact person: Ed Ellis (tc3conference@nottingham.ac.uk)

Website: www.nottingham.ac.uk/ncg/

19th European Young Geotechnical Engineers Conference

Date: 4 - 5 September 2008 Location: Gyor, Hungary

Contact person: Dr Emoke ImreE-mail:

issmge@ymmfk.szie.hu; imreemok@hotmail.com

5th International Geotechnical Seminar- Bored and Auger

Date: 8 - 10 September 2008 Location: Ghent, Belgium

Contact person: Prof. William Van Impe E-mail: william.vanimpe@ugent.be

Stress Wave 2008 - 8th International Conference on the

**Application of Stress Wave Theory to Piles** 

Date: 8 - 10 September 2008 Location: Lisbon, Portugal

Contact person: Prof. Jaime Santos (sw2008@civil.ist.utl.pt)

Website: www.civil.ist.utl.pt/sw2008

International Workshop - ISSMGE TC28 Hungary 2008

Date: 12 - 13 September 2008

Location: University of Tech & Econ. , Budapest-, Hungary

Contact person: Mrs. Andrea Zseni (contact@issmge-tc28-

hungary.net)

Website: issmge-tc28-hungary.net/main.php?menu=1

11th Baltic Sea Geotechnical Conference - Geotechnics in

Maritime Engineering

Date: 15 - 18 September 2008

Location: Gdansk, Poland (BC11@pg.gda.pl)

Website: www.pg.gda.pl/~BC11

4th International Symposium on Pre-Failure Deformation Characteristics of Geomaterials and Symposium on

Characterization and Behavior of Interfaces

Date: 22 - 24 September 2008

Location: Global Learning Center, Atlanta, Georgia, USA Contact person: Glenn J. Rix (glenn.rix@ce.gatech.edu)

IV International Conference on Scour and Erosion 2008

Date: 5-7 November 2008

Location: Chuo University, Tokyo, Japan Contact person: Professor Sekiguchi

(sekiguch@ujigawa.mbox.media.kyoto-u.ac.jp)

Website: icse-4.kz.tsukuba.ac.jp/

6th Asian Young Geotechnical Engineers' Conference - Next

Generation Geotechnics (20 - 21 December)

Date: 20 - 21 December 2008

Location: Indian Inst. Science Campus, Bangalore, India

Contact person: Prof. TG Sitharam (sitharam@civil.iisc.ernet.in) Website: civil.iisc.ernet.in/~igc2008/

### 2009

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

XVII International Conference for Soil Mechanics and

Geotechnical Engineering Date: 5 - 9 October 2009

Location: Bibliotheca Alexandrina, Alexandria, Egypt

Website: www.2009icsmge-egypt.org/

# **Event Diary (continued)**

# NON-ISSMGE SPONSORED EVENTS 2008

2nd British Geotechnical Association Conference on

Foundations- ICOF2008 Date: 24 - 27 June 2008

Location: University of Dundee, Dundee, Scotland, UK

Contact person: Dr. Michael Brown E-mail: m.j.z.brown@dundee.ac.uk

Website: www.dundee.ac.uk/civileng/icof2008

33rd International Geological Congress

Date: 4 - 15 August 2008 Location: Oslo, Norway Contact person: 33rd IGC Website: www.33igc.org

6th International Conference on Case Histories in

Geotechnical Engineering Date: 11 - 16 August 2008 Location: Washington, D.C., USA

Contact person: CShamsher Prakash (prakash@umr.edu)

Website: www.6icchge2008.org

I Simposio suramericano de excavaciones en roca - XII

Congreso colombiano de geotecnia Date: 1 - 4 September 2008

Location: Colombia

Organizer: SCG (scg1@colomsat.net.co)

Website: www.scg.org.co

4th European Geosynthetics Conference, Edinburgh, UK

Date: 7 - 10 September 2008 Organizer: UK Chapter of the IGS

Website: www.eurogeo4.org/eurogeo4/index.htm

12th International Conference - Geotechnics 2008

Date: 10 - 12 September 2008 Location: Vysoké Tatry, Slovakia Contact person: Ing. Nora BADÍKOVÁ E-mail: orgware@mail.t-com.sk

XII International Conference of IACMAG

Date: 1 - 6 October 2008

Location: India

Contact person: Dr. D. N. Singh (dns@civil.iitb.ac.in)

Website: www.12iacmag.com

NUCGE 08: International Conference on Numerical

Computation in Geotechnical Engineering

Date: 27-29 October 2008

Location: University of Skikda, Skikda, Algeria E-mail: larmacs@univ-skikda.dz, nucge08@gmail.com

Website: www.univ-skikda.dz

Conferencia 50 Aniversario "Estado de la Practica"

Date: 6 - 9 November 2008

Location: Aula Magna, UC Andres Bello , Caracas, Venezuela Organizer: SVDG (svdg50@hotmail.com/civ.svdg@gmail.com)

Website: www.svdg.org.ve

XXIV National Conference of the Mexican Society of Soil

Mechanics

Date: 26 - 29 November 2008

Location: Convention Centre, Aguascalientes, Mexico Contact person: Dr. Juan M. M. Villa (smms@prodigy.net.mx)

Website: smms.org.mx

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

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

E-mail: dchen@dot.state.tx.us

## **Editorial Remarks**

The editorial board is pleased to send the ISSMGE members ISSMGE Bulletin Vol.2, Issue 2 in June 2008, which includes a message from the Vice President, reminiscences, regional conference report and activities. Contributions from member societies and Technical Committee are 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).

# **Corporate Members**



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