

SIMSG ISSMGE



# ISSMGE Bulletin

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**International Society for Soil Mechanics and Geotechnical Engineering**

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## MESSAGE FROM THE NEW ISSMGE PRESIDENT

**Prof. Dr.-Ing. Roger Frank**

Dear Members of ISSMGE,  
Dear Colleagues,

It is a great honour and privilege for me to have been elected by the Member Societies of ISSMGE as your President for the 4-year term from 2013 to 2017. The election took place during the Council meeting, just before the opening of the 18th International Conference on Soils Mechanics and Geotechnical Engineering (18 ICSMGE) in Paris, 2-6 September 2013.

Before updating you with the various matters which might be of interest to you, I would like to acknowledge the great work and achievements of my two predecessors, President Pedro Sêco e Pinto and President Jean-Louis Briaud. I was a member of the Board during their two mandates and it was a real pleasure to work under their leadership, with the efficient assistance of our Secretary General Neil Taylor. My deep gratitude also goes to many officers of ISSMGE and to all of you who made ISSMGE what it is. Now, I am "in charge"... I feel that it is truly a great challenge for which I shall devote all my possible energy and enthusiasm.

I have chosen to express my news, comments and ideas in these columns of our ISSMGE Bulletin because I feel that is the natural channel for communication between us. It will be my main channel of communication during my mandate.

As the new President, I have to comment first on the 18 ICSMGE, held in Paris, trying to be the judge and no more the party! Some 2000 scientists from 100 countries participated in the event (1875 colleagues, exactly, were registered for the scientific sessions - see report by the French Society CFMS in this issue of ISSMGE Bulletin). For many of the participants, I understood that the Paris Conference was a real success. This is the best reward for the French Society (CFMS) which worked very hard for the event during the past 4 years. One of the



## Message from the new ISSMGE President (CONTINUED)

main lessons to be drawn concerns the mobilisation created inside ISSMGE itself, through its Technical Committees (TCs) and their Officers. Indeed, not only were the TCs involved with selecting 7 honour lecturers for the plenary sessions (following the wish of Jean-Louis), but also were in charge of organising the scientific content of all the parallel sessions (discussion sessions, poster sessions and workshops). This resulted in a very high scientific level for all the sessions, which was recognised by many of the participants. I wish to thank here all the contributors, in the plenary sessions and in the parallel sessions, for the quality of their presentations and for the dedication they showed to ISSMGE. I shall certainly examine, as soon as possible, with the Board and with the organisers of the 19th ICSMGE in Seoul (2017) if we can, and how we can repeat this successful involvement of ISSMGE TCs.

The 5th International Young Geotechnical Engineers' Conference (iYGEC 2013) held just before the 18 ICSMGE was also a great success. It brought together 164 participants from 57 countries - see report by Yu-Jun Cui, Chair of the iYGEC OC in this issue of ISSMGE Bulletin.

Let me introduce to you the new ISSMGE Board and its 12 members; see:

<http://www.issmge.org/en/the-society/the-board/home>

Apart from the President, the immediate Past President (Jean-Louis Briaud) and the Secretary General (Neil Taylor), the six Vice-Presidents of ISSMGE now sitting on the Board are: Fatma Baligh (for Africa), Ikuo Towhata (for Asia), Mark Jaksa (for Australasia), Antonio Gens (for Europe), Paul Mayne (for North America) and Jarbas Milititsky (for South America), as well as three members appointed by me after consultation (following the ISSMGE statutes): Marc Ballouz (Lebanon), Etienne Marcelin Kana (Cameroon) and Nicoleta Rădulescu (Romania). Note that, if I am correct, it is the first time that we have two ladies sitting on ISSMGE Board.

The Board will hold its first in-person meeting in London on 18-19 March 2014, at the invitation of Geotechnical Consulting Group and the British Geotechnical Association. This will allow us to participate in the Rankine Lecture at Imperial College, to be delivered by Professor Guy Housby from Oxford University. We are also invited to the Pre-Rankine Seminar held at Imperial College, dedicated this year to Professor Nicholas Ambraseys, who passed away in December 2012. It is intended that the main discussion topics and decisions taken by the Board will be posted on the ISSMGE website by our Secretary General.

The Board has maintained most of the working structure of ISSMGE established by Jean-Louis Briaud. Six of the previous Board Level Committees (BLCs) have been retained and the Chairs have already been nominated by the Board. See: <http://www.issmge.org/en/the-society/working-structure-issmge> :

- Awards Committee (AWAC), Chair: Charles Ng (Hong Kong)
- Corporate Associates Presidential Group (CAPG), Chair: Sukumar Pathmanandavel (Australia)
- Innovation and Development Committee (IDC), Chair: Dimitrios Zekkos (USA)
- Public Relations Committee (PRC), Chair: Sherif Wissa (Egypt)
- Students and Young Members Presidential Group (SYMPG), Chair: Jennifer Nicks (USA)
- Technical Oversight Committee (TOC), Chair: Pierre Delage (France).

The BLCs have resumed their work and are, presently, in the process of updating their membership and reviewing their terms of reference.

It has been agreed that all the six ISSMGE Vice-Presidents will sit on the TOC, in order to facilitate, in particular, the communication and coordination with the TCs (current and planned) hosted by the Member Societies in their respective Region. The VPs have each nominated a colleague from their Region to assist them on the Committee.

## Message from the new ISSMGE President (CONTINUED)

### Visit to the Victor de Mello library space

Very recently, I had the chance to visit the space of the library of the Polytechnic School of the University of São Paulo (Brazil) devoted to Victor de Mello, President of ISSMGE 1981-1985 (see: <http://www.issmge.org/en/announcements-en/314-past-president-victor-de-mello-passes-away>). This space gathers all the books, documents and journals belonging to Victor de Mello. According to our colleague, Waldemar Hachich, Vice-President for South America 2005-2009, the Victor de Mello space includes:

- about 1500 titles of books and conference proceedings (over 2000 volumes);
- about 200 collections of journals and magazines, the most important of them being complete from the fifties till 2003 (the Polytechnic School has ensured the continuity of most of the collections to the present day);
- hundreds of files of projects on which Victor worked for about five decades.

My visit to the Victor de Mello space with our colleagues from São Paulo, Waldemar Hachich and Werner Bilfinger (see photo), gave me a feeling of deep recognition of Victor. While I was going through some of his hand-written pencil notes (Victor would annotate most of his books and journals!), it came back to my mind the wonderful moments one would spend in his company. His extremely wide culture, his deep expertise on nearly all topics of geotechnical engineering, his kindness, modesty, permanent concerns about the younger ones and his friendship impressed me each time I had the chance to meet him or visit him.

Bye bye for now! I will soon be back in contact with you in these columns. In the meantime, do not hesitate to write to any one of us, the Board members or the BLCs' Chairs, if you wish to clarify something or if you wish to raise a question about ISSMGE and its governance!

Roger Frank  
Paris, 20 November 2013



2 October 2013. Waldemar Hachich, Roger Frank and Werner Bilfinger (from left to right) visiting the Victor de Mello library space in the Polytechnic School of the University of São Paulo

**CONFERENCE REPORT:****The 18th INTERNATIONAL CONFERENCE ON SOIL MECHANICS AND GEOTECHNICAL ENGINEERING (18 ICSMGE)****Paris, 2-6 September 2013**

Philippe Mestat, IFSTTAR, President of the CFMS, Chairman of the 18th ICSMGE  
Jacques ROBERT, ARCADIS, Vice President of CFMS

The 18th International Conference on Soil Mechanics and Geotechnical Engineering (18 ICSMGE), which took place from 2 to 6 September 2013 at the Palais des Congrès of Paris (France) and was organized by the French Society for Soil Mechanics and Geotechnical Engineering (CFMS), was a very successful event. It was preceded by the 5th International Young Geotechnical Engineers' Conference (iYGEC 2013) held on the 31st of August and 1st of September at the Ecole des Ponts at Marne-la-Vallée (which brought together 164 participants from 57 countries - see report by Yu-Jun Cui, Chair of the iYGEC OC in this issue of ISSMGE Bulletin).

On Sunday 1st of September, the 80 Member Societies attending or being represented elected the new President of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) for four years: Professor Roger Frank (Ecole des Ponts, France) was elected, and he thus succeeds Professor Jean-Louis Briaud (Texas A&M University, Texas, USA). Of course, the CFMS, which had nominated him, congratulates him and will support him in his work throughout the four years. At the same meeting, the host city of the next International Conference in 2017 was decided: it is Seoul (South Korea).

The participation in the 18th ICSMGE was a success: there were 2081 participants in total, 179 accompanying persons and 87 exhibitors, including four partners, one Platinum sponsor and 15 Gold sponsors. In particular, 1875 participants were registered for the scientific sessions. A big thank to all of them, as they made the Conference possible. The 12 plenary sessions on Monday and Tuesday brought together up to 1650 participants. The important implication of the Technical Committees (TCs) of the ISSMGE created a strong mobilisation in the 55 parallel sessions held on Wednesday and Thursday consisting of 28 discussion sessions, 19 workshops and 8 special sessions (there were on average 800 participants during each of the seven time slots).

The four volumes of the Proceedings of the 18th ICSMGE (3486 pages, plus the table of contents and the index of authors) contain the Terzaghi Oration, the Honour Lectures, and the Special Lectures, followed by the written contributions presented according to the relevant TC and introduced by the TC General Reports. More than half of the 772 written contributions were presented orally during the discussion sessions (173) or during the poster sessions (230). The proceedings will soon be available online, free of charge, through the website of the CFMS ([www.geotechnique.org](http://www.geotechnique.org)) and the website of the ISSMGE ([www.issmge.org](http://www.issmge.org)). Many pictures taken during the sessions and breaks are already available on the Conference website ([www.issmge2013.org](http://www.issmge2013.org)).

The 7 technical visits on Friday brought together about 133 participants. The Francophone event, which took place at the Conservatoire National des Arts et Métiers (CNAM) on Friday afternoon, gathered 64 participants on "Francophone Geotechnics: education and sharing of knowledge".

From the financial point of view, the high participation in Paris 2013 should allow benefits which the CFMS will spend to promote geotechnical engineering and geotechnical engineers in countries which need financial support.

The Geotechnical Exhibition "Underneath ground", organised inside the museum of CNAM and which opened 2 months before the Conference, will go on for some 5 years more. It is a great success with many young visitors: it aims at attracting young talents towards the ground engineering professions in our country (and in other countries too!). A virtual visit of the Geotechnical Exhibition will be uploaded soon.

**CONFERENCE REPORT:  
The 18th INTERNATIONAL CONFERENCE ON SOIL MECHANICS  
AND GEOTECHNICAL ENGINEERING (18 ICSMGE) (CONTINUED)**



Opening session of Paris 2013 Conference in the great amphitheatre of the Palais des Congrès of Paris



Jean-Louis Briaud, President of ISSMGE (2009-2013)

**CONFERENCE REPORT:  
The 18th INTERNATIONAL CONFERENCE ON SOIL MECHANICS  
AND GEOTECHNICAL ENGINEERING (18 ICSMGE) (CONTINUED)**



View of the exhibition hall



Philippe Mestat, IFSTTAR, President of the CFMS, Chairman of the 18th ICSMGE, Paris 2013

**CONFERENCE REPORT:  
The 18th INTERNATIONAL CONFERENCE ON SOIL MECHANICS  
AND GEOTECHNICAL ENGINEERING (18 ICSMGE) (CONTINUED)**



Parallel Session in Room Maillot



Poster presentation in the corridors leading to the parallel sessions

**CONFERENCE REPORT:****The 18th INTERNATIONAL CONFERENCE ON SOIL MECHANICS AND GEOTECHNICAL ENGINEERING (18 ICSMGE) (CONTINUED)**

Gala dinner at the Pavillon Dauphine

**From the Editor of ISSMGE BULLETIN**

During the ICSMGE in Paris, the editing team of the Bulletin got together in a one-star restaurant in the heart of Paris and enjoyed the authentic French cuisine. This gathering was planned by the Editor-in-Chief in order to appreciate the enthusiastic contribution of the team members. The photograph below right was taken after this gathering. If you are interested in what happened after this photograph, please ask one of the editing team members.



During the dinner



After the dinner



## NEWS ON RECENT CONFERENCE

### The 5th international Young Geotechnical Engineers' Conference - iYGEC 2013

Yu-Jun Cui

Chair of the Organizing Committee of 5th iYGEC

The fifth international Young Geotechnical Engineers' Conference - iYGEC 2013 was held on 31st of August and 1st of September, 2013, at Ecole des Ponts Paris Tech (ENPC) under the auspices of the French Society for Soil Mechanics (CFMS) and the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE). The Organising Committee was composed of: Yu-Jun Cui (Chair), Fabrice Emeriault (Co-chair), Séverine Beaunier, Fahd Cuira, Siavash Ghabezloo, Jean-Michel Pereira, Hugo Ravel, Michael Reboul and Anh Minh Tang. The contribution of the following volunteer PhD students was greatly appreciated: Rawaz Muhammed, Trong Vinh Duong, Hamza Menaceur, Sadok Feia, Linh Quyen Dao, Simona Saba, Jean-François Bruchon and Radja Elandaloussi.

The iYGEC conference series aims at bringing together young people who may be studying for a PhD or Msc or at the early stage of their career in industry or academia, and enables them to communicate with each other and to share their experience in their academic and professional activities. Traditionally, the participants are selected by their respective ISSMGE Member Societies - i.e., two nominees per Member Society. For this fifth edition of iYGEC, in order to further promote the exchanges, the participation was extended to all young geotechnical engineers. This was done without losing the iYGEC's tradition: thus, a mixed format was adopted with nominees and non-nominees.

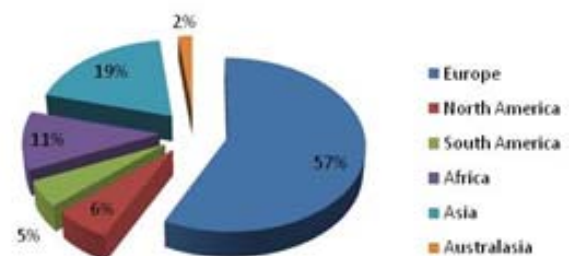


Fig. 1. Participation of countries by continent



Fig. 2. Picture of all the participants

In total 164 young engineers participated in the event, with a distribution as 60% nominees and 40% non-nominees, 55% academia and 45% practitioners, and 70% men and 30% women. 57 countries were represented with a repartition by continent shown in Fig. 1. Fig. 2 is the picture of all the participants.

## NEWS ON RECENT CONFERENCE

### The 5th international Young Geotechnical Engineers' Conference - iYGEC 2013 (CONTINUED)

The papers received were peer-reviewed by experts in the field of geotechnical engineering. A total of 143 papers was accepted and published in the proceedings (see the cover in Fig. 3).

As for the Conference programme, after the keynote lecture delivered by Dr Alain Puech on “Gassy soils: a challenging issue in offshore geotechnical engineering”, 128 oral presentations were organised in 8 parallel sessions (three running at the same time), with the following topics: laboratory testing, in-situ testing, slope stability, soil behaviour, ground improvement, modelling, earthquake and geodynamics, foundations, earthworks, tunnel and underground structure, and retaining structure. In order to prepare the general report for the plenary session devoted to iYGEC inside the 18th International Conference on Soil Mechanics and Geotechnical Engineering - Paris 2013, 18 reporters were mobilised to the various parallel sessions: Sara Amoroso (Sudan), Cécilia Bohn (France), Yuepeng Dong (UK), Leonardo Dorador (Egypt), Richard Heritage (New Zealand), Anna Karatzetzou (Greece), Hatice Kaya (Germany), David Lacey (Australia), Frederick Levy (UK), Layal Maddah (Lebanon), Marcos Montoro (Argentina), Tejas Murthy (India), Gaston Quaglia (Argentina), Sylvie Raymackers (Belgium), Sean Rees (United Kingdom), Daniel Vandenberghe (USA), Kristine Vandenboer (Belgium) and Marek Zalesky (Czech Republic). Fig. 4 is the picture of 16 of them.

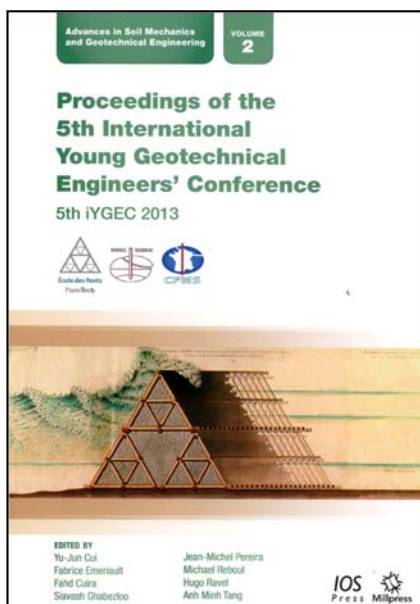


Fig. 3. Proceedings



Fig. 4: Reporters

At the end of the Conference, the reporters worked together to prepare the general report and to elect two representatives (David Lacey from Australia and Gaston Quaglia from Argentina) for the oral presentation in the iYGEC Session of 18 ICSMGE - Paris 2013.

It is important to note that two outstanding presentations were selected by the Organising Committee to be presented during the iYGEC Session of 18 ICSMGE - Paris 2013:

- Francesca Ceccato (Italy): Effect of wood degradation and soil creep on the behavior of wooden pile foundation in Venice;
- Antonio Correia (Portugal): An innovative deep foundation macro-element model for seismic analysis of pile/column supports.

Thanks again to David and Gaston for their excellent general report and congratulations again to Francesca and Antonio for their success.

## NEWS ON RECENT CONFERENCE

### The 5th international Young Geotechnical Engineers' Conference - iYGEC 2013 (CONTINUED)

Finally, I would like to finish my report with the kind and encouraging words from Prof. Jean-Louis Briaud, our former ISSMGE President:

*Dear Yu-Jun,*

*You and your team deserve a lot of compliments for this magnificent success. You had more young people participating in this conference than any time in the history of ISSMGE. I heard nothing but praise about the event and I wish I could find a way to reward all of you for this devotion and unselfishness. I am afraid that I do not have the right answer but you should pride yourself to have made a difference, to have had an impact on the future generation and to have created an unforgettable moment in the mind of many. It is this kind of tremendously successful effort with nothing but a hand shake or a pat on the back at the end which makes life worth living and which allows us to fall asleep at night with a smile on our face.*

*Happy dreams.*

*Jean-Louis*

## RECIPIENT OF KEVIN NASH GOLD MEDAL DURING THE 18TH ICSMGE IN PARIS

The Kevin Nash Gold Medal is awarded in memory of Professor Kevin Nash, Secretary General of the International Society (1965-1981). The medal is awarded to a person who, through his distinction as an engineer, through his international contributions to engineering practice and education, through his contributions to international good will, and through his service to the International Society has made a major contribution to fostering the ideals and goals of the International Society for Soil Mechanics and Geotechnical Engineering throughout the world.



The recipient is to be selected by a committee composed of the Past Presidents of the International Society, chaired by the immediate Past President, and the announcement will be made at the opening of each International Conference. Presidents and Past Presidents are not eligible to receive the Award. The ISSMGE secretariat will write to the Member Societies, asking them to forward nominations for recipients of the Kevin Nash Gold Medal to the Immediate Past President.



Professor Heinz Brandl - flanked by all ISSMGE-Presidents of the past 20 years (left: P. Seco e Pinto, W. Van Impe; right: J.L. Briaud, K. Ishihara, M. Jamiolkowski), thus underlining their high appreciation of his lifework

The most recent recipient of the Kevin Nash Medal was announced during the ICSMGE in Paris. This honourable person is Prof. Dr. Heinz Brandl, Vienna University of Technology, Austria. Professor Brandl has been a full professor for geotechnical engineering since 1977, chairing the Geotechnical Institute founded by Professor Terzaghi in 1928 at the Vienna University of Technology, Austria, until 2009 and is now active as Professor Emeritus.

His creative work comprises about 530 scientific publications (including 21 books) partly translated in 18 languages. He also published on philosophical aspects and on ethics in our profession. Prof. Brandl delivered more than 500 invited lectures, e.g. the 2001 Rankine Lecture or the 2010 Giroud Lecture of IGS, and he has been active worldwide since 1968 as chairman, general reporter, keynote lecturer etc. at numerous international conferences on geotechnical engineering, geosynthetics, road and environmental engineering on all continents.

## RECIPIENT OF KEVIN NASH GOLD MEDAL DURING THE 18TH ICSMGE IN PARIS (CONTINUED)

Since 1963 he has been fully responsible for about 4000 projects of civil engineering, geotechnical and hydro engineering, road and railway engineering, structural and environmental engineering, thus intensively combining research and development, theory and practice with a strong interdisciplinary view.

His innovations represent important advances in civil engineering, geotechnical and environmental engineering. He was a manifold geotechnical pioneer, for instance of interactive designing with contingency plans, advanced earthworks, soil stabilization and deep soil improvement, freezing-thawing problems, spectacular retaining structures (up to 70 m height), pre-stressed ground anchors (up to 130 m length already 40 years ago), outstanding underpinning, slope and rock engineering, geosynthetics, landfill engineering and geothermal geotechnics.

Prof. Brandl has been a member of several international scientific committees within the ISSMGE and related Societies. Since 42 years he has been President of the Austrian Member Society of ISSMGE; thus he is worldwide the longest serving chairman in the ISSMGE's history. From 1997 to 2001 he was European Vice-President of the ISSMGE. He is a member of the editorial board and reviewer of several scientific journals worldwide. Prof. Brandl received numerous national and international awards, and other honours.

What follows is his vote of thanks that was made during the Opening Ceremony of the Paris Conference.

*Mr. President,  
Dear Past Presidents,  
Ladies and Gentlemen,*

*It gives me great honour and pleasure having been awarded the prestigious Kevin Nash Gold Medal today. Thank you so much.*

*This year it's just 50 years that I started my career in Geotechnical Engineering. As an ISSMGE Council Member, voting for Austria since 45 years I have known personally all giants of our profession in this period, hence also Prof. Nash, and dominating personalities of related societies (e.g. Rock Mechanics, Geosynthetics, Road and Hydro engineering).*

*Due to the geographical position and historical roots of the Terzaghi Institute at the Vienna University of Technology my view has been from the very beginning also to Eastern Europe. This was nearly 30 years an exciting challenge due to the "Iron Curtain" that separated Europe. The "Danube European Conferences for Geotechnical Engineering" were the first Events in Europe, which brought together colleagues from either side. Next year we will celebrate the 50<sup>th</sup> Anniversary in Vienna, and I do hope that many of you will join us.*

*In the year 2000 Board and Council of ISSMGE decided to support the Geotechnical Heritage Museum in Vienna focusing on the era of K. Terzaghi. I am still working on this "vision" which will contain also exhibits from outstanding contemporaries of K. Terzaghi and from professionally related personalities (mainly rock engineering) - partly up to the present. Any support from your side - worldwide - is highly welcome.*

*Another aim is my historical book on our profession, focusing on the European Member Societies of ISSMGE and related Societies; new details can be expected.*

*I would like to end with a recommendation to the younger colleagues here in the hall: Try to combine theory with practice as it was already the most successful way of K. Terzaghi, A. Casagrande, R. Peck, Alex Skempton and other pioneers of our profession. Moreover, don't stick only to one narrow topic in the wide field of geotechnical engineering, but dip into its versatility and interdisciplinary challenges.*

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE

ISSMGE Foundation supply financial supports to promising people who are enthusiastic to play important roles internationally but cannot afford necessary costs. This time 21 people received this support for their participation in 18th ICSMGE and 5th iYGEC (international Young Geotechnical Engineer Conference), both of which took place in September, 2013, in Paris. Their reports are presented in this article.

### (1) Abdou Xaadir GAYE, Senegal

My article talking of optimization of the calculation of pavement in the tropics, was nominated for publication in the proceedings of the international conference of young geotechnical engineers, and an oral presentation. At the same time, I was invited to the 18th International Conference on Soil Mechanics and Geotechnical Engineering.

Living in developing countries (SENAGAL) where scientific research is not well developed to receive subsidies even less in the field of geotechnical engineering, I received a grant from the International Society of Soil Mechanics and geotechnical engineering to participate in both events. I had acquired aware of these two events a wide range of experience but also an open mind in the geotechnical world.

Road engineering in tropical and desert countries is a difficult technique. In these areas, any problem road is practically a new problem with a specific character.

We have proposed to study the CBR in relation to other soil identification parameters. We obtained three formulas of prediction of CBR function of other parameters. These formulas are detailed in the article.

Starting from slope stability, in laboratory testing, ground improvement, foundations, modeling, earthworks, tunnels and underground structures, in-situ testing, soil behavior and earthquake geodynamics, retaining structures to monitoring, it is a largemouth knowledge in geotechnical engineering that was served to me. Before and after my presentation, I had to attend a few and especially in the field of earthworks.

I had to make important contacts that will help me in the future likely to develop my skills in the geotechnical engineering field but also to orient myself in the research. Among these contacts, they are people of Albanian, Taiwan, Iran, etc. There were 164 participants consisting in 57 countries. We had to gather some advice from Mr. YU JUN CUI which made us understand that in the research; try to know the why of things especially for those who are engaged in the correlations between parameters.



Photo 1 - Myself in the conference



Photo 2 - Myself and new friend

During the 18th conference, we had to discover a wide range of materials, devices geotechnical measurements which we never got to meet and especially automatic odometer that automatically loads and traces curves being test. This device is very interesting because we lose a lot of time with this test in our country. We had also discovered the pressuremeter designed by Jean Louis BRIAUD a pressuremeter that we have still ignored the existence. Case presentation by some professors has a lot informed us regarding the scope of geotechnical engineering.

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

Participation in these events has been of paramount importance in our careers of young geotechnical engineers. With that, we thank the ISSMGE for helping us to attend and participate. The next edition is scheduled in Korea in 2017 by then we are more motivated than ever to present studies of interesting and innovative research and whether the means allow us we will develop devices and methods of measurement.

### (2) Aleksej ANISKIN, Odessa State University of Civil Engineering and Architecture, Ukraine

The conference was attended by 162 invited delegates from 57 European countries who prepared their presentations. Former USSR countries represented by delegates from Ukraine, Russia, Belarus and Kazakhstan. Submission of reports occurred over two days, August 31 and September 1 at the university Ecole des Ponts ParisTech. The conference was divided into 8 sessions, 4 sessions a day. The sessions lasted for 75-90 minutes with breaks of 15-30 minutes and 90 minutes break for lunch. In general, excepting introductory and concluding part, it was presented a 30-minute report of the Organizing Committee, and a 30 -minute lecture from sponsors and 128 reports from delegates. Each of the delegates was given 10 minutes to report and 5 minutes for discussion. The official conference language was English. There have been 128 reports of delegates that made their presentations at the conference and were divided to several basic sections of Geotechnics: slope stability; laboratory tests ;improving soil; foundations; modelling; earthworks; tunnels and underground structures; field trials; behaviour of soils; earthquakes and geodynamics ;supporting structures; monitoring. Among the presentations selected for the report on the main conference:

- Franchesca Ceccato from Italy;
- Antonio Araujo Correia from Portugal.

And to report on the results of the youth conference:

- Gaston Quaglia from Argentina;
- David Lasey from Australia.

My presentation was entitled "Pressure of isotropic granular medium on closely spaced walls of arbitrary curvature".



Photo 1 - Answering questions

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

### (3) Ani Kosho, Albanian Geotechnical Society, Albania

As a nominee member of the Albanian Geotechnical Society, I was very privileged to represent this society in an International event of greater importance as was the 5th IYGEC.

The participation in this important event was a great success for my professional career in the geotechnical engineering field. I had the opportunity to meet engineers from all over the world and to learn a lot from them.

The most interesting feature of the conference was discussing for each paper with the authors and with the professors that were present. During these discussions I had the opportunity to create contacts and links with researchers and that deal with topics similar to mine and we can continue to communicate and to shear ideas with each other.

One of the beautiful things of this conference was the gala dinner. In the young engineers dinner we had the opportunity to talk about how they organize their days at work; how they organize their research studies and also talking about the opportunities each country has for the development of the geotechnical engineering.

The gala dinner was a dinner to be remembered, everything was perfect, I was surrounded by a lot of professor and has the possibility to talk with them for all the conference themes and for the opportunity that geotechnical field has in Albania.

Finally I want to thank all the people that helped me to attend this conference, starting from the President of ISSMGE, Prof. Jean Luis Briaud, ISSMGE Foundation and Prof. Harry Poulos. To Prof. Luljeta Bozo, President of Albanian Geotechnical Society, for the continuous support for the young geotechnical members of AGS, to "ALTEA & Geostudio2000" the laboratory that helped me in every steep of my career. A special thanks to Mrs. Severine Beaunier for the work she has done.

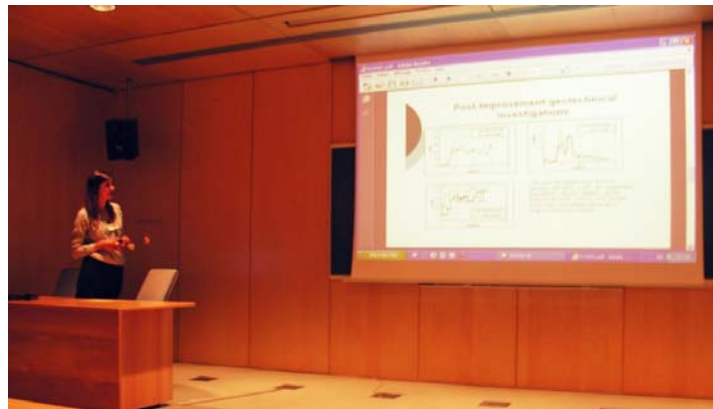


Photo 1 - During my presentation at 5th IYGEC



## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 2 - With Albanian participant from AGS International Conference (Prof. Dr. Luljeta Bozo, Mr. Skender Allkja, Olsi Koreta)



Photo 3 - With Prof. Jean Luis Briaudat 18th at gala dinner

### (4) Assem Issina, L.N. Gumilyov Eurasian National University in the City of Astana, Kazakhstan

The 5th International Young Geotechnical Engineers Conference (5th IYGEC), "Advances in Soil Mechanics and Geotechnical Engineering", was a very successful and unique experience. The conference was held at National School of Bridges and Roads (Ecole des Ponts ParisTech), Paris, France. There were more than 140 young participants from France, Kazakhstan, USA, UK, China, Japan, Germany, Canada, Korea, Russia, Singapore, Malaysia, Sweden, India, Taiwan, Italy, Austria, Australia, Norway, Spain, Belarus, Lebanon, Sudan, Turkey, Romania, Ukraine, Portugal, Netherlands, Poland, Hungary, South Africa, Brazil, Finland, Vietnam, Ireland, Iran, Egypt, New Zealand, Greece, Serbia, Argentina, Slovakia, Belgium, and Slovenia. In addition, the conferences also provide a great opportunity for young geotechnical engineers to successfully demonstrate leadership, build network, and exchange beneficial knowledge among others and famous scholars.

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 1 - The opening ceremony of the 5th IYGEC



Photo 2 - Myself giving her talk entitled "Geotechnical investigations of historical monuments of Central Asia" during the session-4 of Foundation (4a) with about 75 participants (on August 31, 2013)

According to the 5th IYGEC programme, I have been involved in participations in the first two days of the 18th International Conference on Soil Mechanics and Geotechnical Engineering (18th ICSMGE), "Challenges and Innovations in Geotechnics". The conference was held at the Paris International Conference Centre (Palais des Congres de Paris). The conference was attended by many well-known professors and scientists from all over the world.

Both conferences have given rise to further cooperation and exchange of experience between scientists from different countries and young engineers.

Participation in these great events was a great way for me to make contacts with leading and rising scholars in the geotechnical engineering society. I deeply appreciated the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) for providing me with this great opportunity to demonstrate leadership and exchange beneficial knowledge.

I would like to express my deep gratitude and appreciation to Prof. Askar Zhussupbekov (President of Kazakhstan Geotechnical Society, Eurasian National University, Astana, Kazakhstan) for his valuable support, encouragement, and guidance, without which the current study would not have been accomplished.

Finally, I must also acknowledge and thank the nomination of the Kazakhstan Geotechnical Society (KGS), as well as a generous grant from ISSMGE that enabled me to present my research in the 5th IYGEC. I would like to express my sincere appreciation for the support of ISSMGE young geotechnical engineers to develop their professional skills.



Photo 3 - Myself near the board of the 18th ICSMGE

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 4 - "Family Photo" of the 5th IYGEC

### (5) Ghassan Akrouch, Texas A&M University, USA

The two conferences were organized by the International Society of Soil Mechanics and Geotechnical Engineering. The conferences took place in Paris, France from 30 August to 6 September. The conferences covered most of the topics related to soil mechanics and geotechnical engineering through plenary sessions and workshops organized by the different technical committees.

I presented my work and the on-going research at Texas A&M University regarding my research topic during the iYGEC. I attended most of the sessions and presentation given by my colleagues on the different topics of geotechnical engineering. During the session breaks, I had the chance to meet Ph.D. students from different areas of this world, communicate with them, and share my research interest and work. During this conference too, I had the chance to meet the organizers and the chair, Prof. Yu-Jun Cui. The conference ended on the 1st of September with a closing ceremony and a summary. In addition, two participants were nominated as the most outstanding presentation and they presented their work at the ICSMGE

The ICSMGE started on the 2nd of September with an opening ceremony at 9:00 A.M with more than 1500 participant. The program included two days of plenary sessions given by senior professor from different universities covering different topics in the honour of great geotechnical engineers that made great contribution to our field. The 3rd and 4th day were allocated for workshops and technical sessions organized by the different technical committees covering all aspect of geotechnical engineering.

This conference gave me the opportunity to increase my knowledge in the different fields of geotechnical engineering as a Ph.D. student. It gave me the opportunity to meet leaders of academia and industry in this field. I had the chance to talk to many future researched about potential future work and collaboration in the academia and industry fields. One of the important things is that I participated in the first meeting of the new technical committee on energy geotechnics chaired by Professor Marcelo Sanchez.

At the end, I would like to thank ISSMGE foundation for funding my trip.

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 1 - Attendees of the 5th iYGEC



Photo 2 - My presentation at the 5th International Young Geotechnical Engineer's Conference



Photo 3 - Opening Ceremony of the 18th ISSMGE



Photo 4 - Dinner in Paris with President Jean-Louis, his family, and colleague (I am in the middle to the right)

### (6) Heba Kamal El Dine Moustafa, Housing & Building National Research Centre (HBRC), USA

18th ICSMGE was jointly organized by the French Society for soil mechanics and geotechnical engineering and ISSMGE this year. The main topic of the conference was "Challenges and Innovations in Geotechnics" and the keynote lectures, workshops and discussion sessions were concentrated on this topic. The conference started on the 2nd until 6th of September with an opening ceremony with more than 1500 participants. The program included two days of plenary sessions given by leader professors and professionals in the field of geotechnical engineering. The other days were allocated for workshops and technical sessions organized by the different technical committees covering all aspect of geotechnical engineering, and the fifth day is for field visit in Paris. The participation in the conference has enabled me learn from the leaders of the profession. I would like to express my sincere thanks to ISSMGE foundation for providing financial support for participating the 18th ICSMGE conference.

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

(7) Jeanne Florette, Tsala Nomo, LABOGENIE, Cameroon

Let me first thanks the ISSMGE foundation for the opportunity given to me to participate at these events. There was very amazing to participate at these events especially the 18th ICSMGE which were very magnificent. People of many countries who were there, leading person of professional practices that I met, show stands were very interesting and I was impressed by the organizing committee which done a good job by the successful of these events. I learnt a lot of this experience.

For the 5iYGEC: Communications were really practical for being applied directly to building site in process. These communications are also being for researches which explain natural phenomenon commonly happened like landslides. I especially appreciated the communication which talks about « correlation between rock permeability and rock quality designation (RQD) of rock. This correlation is effectively conceivable and we can really do a study in my country which actually going to build dams. We can also consider this correlation for introductory dam's studies or we can use it for verification or prediction of permeability for a RQD done and for a permeability test in process. The others communications are also interesting and I learnt more about it notably the one on slopes stability, laboratory testing, ground improvement, Earthworks, foundations, Tunnel and underground structure, in situ testing, soil behavior, modeling, Earthquake and Geodynamics, retained structures, Monitoring.

For the 18th ICSMGE: Here again, I learnt more. I discovered software which computes slope stability of rock. A demo version of this software has been given to me, generally in my country, we put rock slope in inspection. There was my first time to ear slope stability of rock. Moreover, I eared of a method which is use for stabilization of embankment slope. We put geotextile under the embankment which generate a shear stress and go against landslides. I saw many geotechnical engineers who have their names on many geotechnical books: JP MAGNAN, Philippe MESTAT, Jean Louis BRIAUD, Alain GUILLOUX and so one. I also learn more about Deep foundations, unsaturated soils, soils structure and retaining walls, underground constructions, the contribution of physical modeling to geotechnical engineering, interactive geotechnical design, challenges of soil-structure interaction and retained walls analyses, foundations engineering in difficult soft soil conditions.

Thanks again,



Photo 1 - Opening session of fifth young Geotechnical Engineer Conference

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

### (8) Juan Ayala, Chilean Society of Geotechnics / Golder Associates, Chile

First of all, I would like to thank the ISSMGE Foundation for the initiative in helping me to afford the trip and registration fees to attend these conferences and have the chance to present my work in the 5th international young geotechnical engineers' conference in Paris, thanks to the ISSMGE President Professor Jean-Louis Briaud, whom I had the chance to meet back in 2011 in Santiago of Chile for the 5th international conference on earthquake geotechnical engineering and see again in this opportunity, he's a really nice person. Finally I like also thanks to the Professor Harry Poulos, Chair of the ISSMGE Membership, Practitioners, and Academicians Committee (MPAC) for approving my application.

I remember back in 2011 when I was starting myself in geotechnics, have the chance to meet senior engineers with many years of experience and still enjoying what they were doing, now I think that was the main reason why I started in the area. Now that I have just started to work and took the chance to travel and meet with "new" old friends from different countries and different occupations in geotechnics I'm really glad to take this way.

The opportunity of present my work in the international young geotechnical engineering conference was something exceptional, It was a really good experience and I'm sure I will try to do it again. Plus have the chance to attend to the 18th international conference in soil mechanics and geotechnical engineering was really good, the lectures where really good specially the Terzaghi Oration from Suzanne Lacasse, outstanding.

For my career I think the opportunity that the ISSMGE Foundation had given me it's very important, and I'm sure that I will not just work for the industry, but also try to do some research with the same experiences that I'm getting while I work, because attend to this conferences shows you the importance of this in engineering and specially in geotechnics. We work in a part of civil engineering that needs a special point of view that not necessarily our structural colleagues understand. With my little experience I've been in the need for example, explaining the importance of some laboratory testing in foundation design, and believe me when you're an ungraduated geotechnical engineer and you're talking to a senior mechanical engineers that not necessarily want to spend some money to know the real "mechanical" properties of the foundation soils, you really have to have your ideas clear.

I think attend to this kind of events will always be a great opportunity to grow professionally and personally, that's why I like to thank again to the ISSMGE Foundation for their help.

Thank you.



Photo 1 - Paris, France

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

### (9) Layal Maddah, Texas A&M University, USA

On the 28th of August, I found myself on a plane to Paris, France from Houston, USA to attend two conferences ICSMGE and iYGEC. The conferences took place between the 30th of August and the 6th of September of 2013. I was privileged to attend the conferences as a nominee of the Lebanese Geotechnical Engineering Society. This experience enabled me of presenting my work on site investigation requirements, made me realize the technical and human contribution in the geotechnical profession, and gave me the chance to meet members of the international geotechnical family.

I presented the article that I have been preparing while working at Dar Al Handasah Shair and Partners ([www.dargroup.com](http://www.dargroup.com)) at the iYGEC conference. The article, co-authored by Prof. Jean-Louis BRIAUD, is titled: "Site Investigation Requirements, an International Study", and included a comparison between different country code requirements for borehole number and depth of investigation points and the number and depth from a probabilistic approach. Aside from presenting this work at the iYGEC, I got the chance to attend other young geotechnical engineers' work presented in the sessions. The work presented made me enthusiastic about developing my research in the future, and more aware about different geotechnical problems and the suggested solutions. I guess this conference gave me a glimpse of what to expect from the ICSMGE conference that turned out to be more than I expected.

On the 2nd of September, the ICSMGE commenced at 9:00 A.M. The program included plenary sessions related to soil mechanics and geotechnical engineering, organized by the technical committees. The sessions were given by outstanding professors of our days on various topics in the honour of geotechnical engineers with huge contribution to our profession (namely Terzaghi, Ishihara, Menard, Bishop, Kerisel, McClelland, Kerry Rowe, and Schofield). In parallel, an exhibition was taking place including display material for various geotechnical contractors, designers, manufacturers, suppliers, and others from different parts of the world. The ISSMGE also had a booth in the exhibition in which ISSMGE members displayed items of interest to the broad membership. The conference did not only make me aware of the various geotechnical topics, challenges, need for innovation, and latest software and techniques employed in the field; it also gave me the opportunity to meet and interact with geotechnical professors and engineers from around the world.

Through the two conferences, I got the chance to meet the conference organizers, professors, professionals, contractors, consultants from different parts of the world. This made me aware of the huge potential we have to develop and promote for our profession especially that the greatest contribution in any project is the human contribution. The conferences made me realize that it is my responsibility to be an active geotechnical engineer, and support my profession through my participation and contribution in ISSMGE events.

I cannot thank the ISSMGE President Prof. Jean-Louis Briaud enough for encouraging and supporting me to participate in this event. As he believes in us as his students and as young geotechnical engineers, he inspires us to work harder every day. I would also love to thank the ISSMGE foundation and Texas A&M University for funding me to get to Paris; I couldn't have done this without their support. My special thanks also go to Dar al-Handasah that made me a geotechnical engineer. I am definitely encouraging my colleagues to attend upcoming conferences, and I hope that someday I get to help young people like



Photo 1 - Attendees of the 5th iYGEC back from the conference (from left to right: me, Ph.D. student Eng. Ahmed Elhashimy Elmaleky, Dr. Jennifer Nicks)

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

myself to achieve their professional dreams as an individual and through organizations like ISSMGE Foundation.



Photo 2 - Opening Ceremony of 18th ISSMGE



Photo 3 - Cultural Event at 18th ISSMGE



Photo 4 - ISSMGE Booth at 18th ISSMGE (Professor Jean-Louis Briaud signing his book)



## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 5 - Of Course...Paris...

### (10) RAKOTOMALALA Lucie, University of Mahajanga, MADAGASCAR

At the time of the 18th International Conference on Soil Mechanics and Geotechnical Engineering, I have an overview of geotechnical know-how for any kind of construction, Knowledge of new methods for teaching Geotechnics and I saw new equipment.

I could meet my colleague and discuss with them many points for the development of geotechnical engineering in Africa and Madagascar.

#### Exhibition

I have seen various materials for soil investigations, geotechnical and structural monitoring instruments:  
 drilling, laboratory and software  
 A complete range of compact and multipurpose specific rigs  
 A large range covering all water wells drilling from small to large depth  
 The latest of Menard-style pressuremeter Exhibition catalogue

#### Meeting with members of CTGA

This is the first time that I could meet my fellow geo-technicians of Africa. We could discussed the following points:

- 1- Young African Geotechnical Engineers
- 2- Corporate Associates.
- 3- Seminars by African Societies
- 4- Aim for an African Code of Practice
- 5- Regional Technical Committees

There is a need to encourage the formation of Technical Committees to address problems and specific needs for Africa 6-Increase the number of African countries, by asking each society to encourage and help a nearby country to form a society, or even better, adopt a country and provide feedback on any obstacles.

This congress was very beneficial for me because that allowed me to acquire knowledge and to improve teaching of geotechnical engineering in Madagascar. Also I present all my thanks to the ISSMGE Foundation to have to grant a purse which allowed me to take part in it

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 1 - Meeting with Claude Plumelle

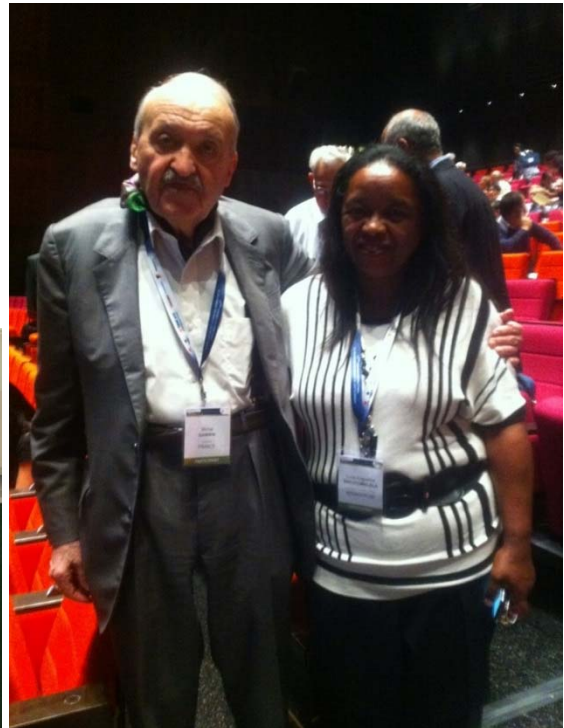


Photo 2 - Meeting with Michel Gambin

### (11) Menzer Pehlivan, Ph.D., Mueser Rutledge Consulting Engineers, New York, USA

I have recently obtained my doctoral degree in geotechnical engineering from The University of Texas at Austin in May 2013 and I am currently working as a Geotechnical Engineer at Mueser Rutledge Consulting Engineers, New York. I have taken numerous leadership positions in national level with the student chapter of the Geo-Institute of ASCE during my graduate studies, thus I believe the value of getting involved with the professional organizations. This year, I have elected as the national nominee for the 18th International Conference on Soil Mechanics and Geotechnical Engineering (ICSMGE) in Paris by The Turkish National Society for ISSMGE. I have been honoured and, at the same time, flattered with this opportunity to represent my country in international level. However, being a graduate student I have needed financial support to attend to the 18th ICSMGE, therefore I have applied to ISSMGE Foundation Award.

Receiving this award enabled me not only to attend to the 18th ICSMGE conference in Paris with the honour of representing my country but also it helped me to develop connections and make presence in international field of geotechnical engineering. I have participated to my first committee meeting with Turkish National Committee where I have met and mingled with the other members and discuss our involvement in international geotechnical engineering arena. At the same time, I have had the chance to interact with professionals from different countries and the famous professional of geotechnical engineering. Moreover, attending to the lectures of distinguished professionals, I have learned the recent advances in broad scale of geotechnical engineering practice. As a young engineer in geotechnical field, the value and benefits of attendance to a conference like ICSMGE which exposes you to inspiring professional is invaluable. Therefore I am grateful to receive the ISSMGE Foundation Award.

The ISSMGE Foundation Award gives a chance to young professionals or any professional, with insufficient funds, who are willing to contribute to the geotechnical field and society. For a young professional like me, attending to an international conference is nothing but inspiring to do more and to carry our profession to the next level. ISSMGE increases the professional involvement and appreciation for the importance of professional organization not only in academia but also in practice within the young generations with this award. The importance of attending and being involved in an international

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

professional organization also helps engineers to be aware of the advances in other countries and help to increase the collaboration, which I believe to be the one of the goals of ISSMGE.

Finally, I would like to take this chance to once again express my sincere gratitude to the ISSMGE Foundation for giving me the award, which enabled me to attend to 18th ICSMGE.



Photo 1 - Prof. Prof. George Gazetas    Photo 2 - Prof. Jean-Louis Briaud

### (12) Miloš Marjanović, Ph.D, University of Belgrade, Faculty of Mining and Geology, Serbia

The 5th International Young Geotechnical Engineers' Conference has been organized by the ISSMGE in cooperation with French Society for Soil Mechanics and Geotechnical Engineering (CFMS) and École des Ponts ParisTech which has hosted the conference. The conference was routinely handled by Dr Cui and his team, and the organization was on a high level covering all details from welcoming, respecting the time-schedule, equipping the participants, technical support during the presentations, catering and organizing social events...

As a continuation of a good tradition, 5th iYGEC invited young engineers from all over the world, and for the first time non-nominees (that have not been recommended by their national ISSMGE society branches) were also welcomed. The turn-out was therefore bigger than the organizers had expected. There were 164 participants and 143 research papers have been presented and published in the conference proceedings. The conference lasted for two days (31.8-1.9.2013) and it was structured in three parallel sessions. Each session lasted for about an hour and a half, during which at least five presentations have been introduced and discussed (10 minutes for presenting and 5 for discussing). The session topics covered practically all geotechnical engineering aspects.

The daily program included several breaks, but those were all actually constructive after-session discussions interrupted by occasional sips of coffee and bites of French delicacies. The venue (École des Ponts) was therefore wisely chosen, because it was isolated and remote enough to keep all participants away from the temptations of Paris and concentrated on the conference. The social event (in the evening of the first conference day) was a different story, since the organizers made an effort to host a great social dinner in the heart of Paris in a wonderful atmosphere of a local restaurant.

From my angle, the conference was a great success: many topics have been discussed, contacts have been established, the awards, reports, and the opportunity to participate at the main ICSMGE event was highly motivating for all of us. It was only a little bit difficult to follow all interesting topics in three parallel sessions. I have personally learned a lot from my colleagues and particularly fruitful was a discussion with Huina Yuan about modern trends of computer science, machine learning in particular, and their application in FEM modelling and simulation. It will surely bring new ideas in my practice that had already been related to machine learning, and perhaps new collaboration.

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 1 - Group photograph - 5iYGEC

### (13) Marcos Montoro, Universidad Nacional de Córdoba, Argentina

Attending to the 5th International Conference of Young Geotechnical Engineers and the 18th International Conference of Soil Mechanics and Geotechnical Engineering was one of the most significant experiences I have in my academic and professional life.

As a member of the Student and Young Members Presidential Group for the period 2009 - 2013 I attended to the first quadrennial meeting of the SYMPG, where we discussed, with the other delegates, the group accomplishments during the last four years and also we share our ideas about the perspective of the future of SYMPG and the ISSMGE. After the meeting Siavash Ghabezloo (French corresponding member SYMPG) guided the group in a visit to the geotechnical laboratories of Paris Tech.

The 5th IYGEC was held in Paris Tech, this conference allowed to bring together more than 160 young Geotechnical Engineers from all over the world. The conference started with a very interesting plenary session about "Gassy Soils". Then the conference was organized in several parallel sessions. Each session was attended by a group of three reporters who were in charge to prepare a summary of the conference in order to produce a general report of the conference and present it in the special session at the 18th ICSMGE. All presentations I could attend were very interesting, and the chairs of each session promoted very interesting discussions and ideas interchange among the attendees and the presenters.

On Sunday evening the 18 reporters had a meeting to prepare the general report. It reflected the most important contributions presented during the technical sessions. Serving as a reporter was a great experience and allowed me to interact with young colleagues from different countries.

The first two days of the 18 ICSMGE were dedicated to the award lectures and keynote lectures, and the last two days were dedicated to the technical sessions and discussions.

During the first two days I could attend to outstanding presentations delivered by well-known lecturers who presented the audience the actual state of the art in our field and highlight the main contributions of the last years in the field and which are our main challenges in the geotechnical engineering practice and research for the near future. The last two days I attended to the Workshop in Geo-Education and the one of IGS. Also I could attend to several technical sessions. All presentations and

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

discussion were very interesting and enrichment for me. This event also allowed me to meet the most renowned researchers, professors and practitioners in our field.

In addition there was a great technical exhibition where I found very interesting products and devices related to our profession and having the chance to speak directly with the manufactures.

After having this great experience I have to thank Pedro Seco e Pinto, Roberto Terzariol and Waldemar Hachich, Jean - Louis Briaud, Paloma Peers, Neil Taylor, Harry Poulos and the ISSMGE Foundation.



Photo 1 - 5th IYGEc reporters group at Ecole National des Ponts Paris Tech.



Photo 2 - Gaston Quaglia and Marcos Montoro (Argentinean delegates)

### (14) Nguyen Minh Hai, Thu Dau Mot University

The 18th ICSMGE at Paris on 2 to 6 September 2013 was a special event for geotechnical engineers from every continent. I strongly that this conference's contributions to our profession were very great. It provided a wonderful occasion to learn from colleagues in a pleasant relaxed atmosphere and to exchange

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

views about the past, the present, and the future of geotechnical engineering. The number of conference participants and exhibitors is as follows:

- 2140 delegates including 167 students;
- 176 accompanying persons
- 96 countries represented ;
- 87 exhibitors including 4 partner sponsors, 1 platinum sponsor, and 15 gold sponsors.

The plenary sessions taken place on 2 and 3 September 2013 consisted of the Terzaghi oration by Suzanne Lacasse, the seven honor lectures organized by Technical Committees (Ishihara lecture by G. Gazetas, Ménard lecture by J.-L. Briaud, Bishop lecture by R. Jardine, Kerisel lecture by G. Calabresi, Mc Clelland lecture by M. Randolph, Kerry Rowe lecture by C. Shackelford, Schofield lecture by M. Bolton), the three special lectures organized by the French Society CFMS (A. Sim, F. Schlosser, V. Fluteaux), a report and presentations from the Young Members (Y.-J. Cui) and a discussion forum on innovations and practices by J.-L. Briaud, S. Springman, S. Pathmanandavel, S. Borel.

The concurrent sessions took place on 4 and 5 Sept 2013. In addition to the 28 TC-organized discussion sessions, there were 19 workshops also organized by TCs, a Franco-Chinese workshop, a symposium on pressuremeters-ISP6, 2 sessions organized by the International Geosynthetics Society. A total of 772 papers were submitted and accepted. About 200 were presented orally and 240 through posters.

6 September 2013 was devoted to the technical visits and to a francophone event at the CNAM Museum (where a geotechnical exhibition was staged starting in June 2013). On the social side, the welcome reception was at the night of 2 September 2013, The Awards luncheon was at the noon of 3 September 2013, and the Gala Dinner was at the evening of 3 September 2013. The election of the next ISSMGE president and the 19th ICSMGE location on 1 September 2013 was also announced. Professor Roger Frank (France) is President of ISSMGE from 2013 to 2017 and the 19th ICSMGE location in 2017 is Seoul, Korea.

Thank the organizers who have worked so hard for the success of the conference organized.



Photo 1 - My Vote for the Next President of ISSMGE Photo 2 - My Vote for the 19th ICSMGE

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 3 - My Presentation in Symposium on Pressuremeters-ISP6

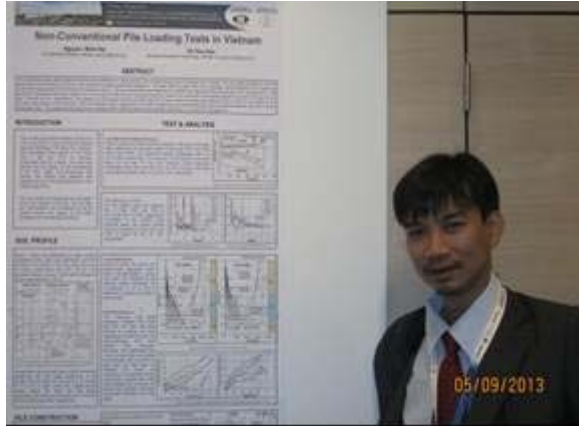


Photo 4 - My Poster in TC 212 - Deep Foundation



Photo 5 - Myself and Friends from Technical University Darmstadt



Photo 6 - Myself and Prof. Robert Holtz

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

### (15) Olsi Koreta, Albanian Geotechnical Society, Albania

The participation in this important event was a great success and a great achievement for my professional career in the geotechnical engineering field. I had the opportunity to meet colleagues from all over the world and to discuss for different topics.

A very important aspect of the conference was not only the technical aspect but also exchanging the life experience between participants by talking about: how they organize their days at work; how they organize their research studies and also talking about the opportunities each country has for the development of the geotechnical engineering.

For me was very interesting knowing about many opportunities that exists in different Technical Universities for supporting young engineers in developing research studies and doctoral studies. Exchanging information and ideas between the participants is very important because this information will be then distributed in the national societies and will play an important role in the development of these societies and therefore in the development of the geotechnical fields.

As a nominee member of the Albanian Geotechnical Society, I was very privileged to represent this society in an International event of greater importance as was the 5th IYGEC.

Finally I want to thank all the people that helped me to attend this conference, starting from the President of ISSMGE, Prof. Jean Luis Briaud, ISSMGE Foundation and Prof. Harry Poulos who approved my grant request. I am also very grateful to Prof. Luljeta Bozo, President of Albanian Geotechnical Society, for the continuous support for the young geotechnical members of AGS and for the immense contribution in the development of the geotechnical field in Albania. A special thanks to the organizing committee and to Mrs. Severine Beaunier for responding to our e-mails.

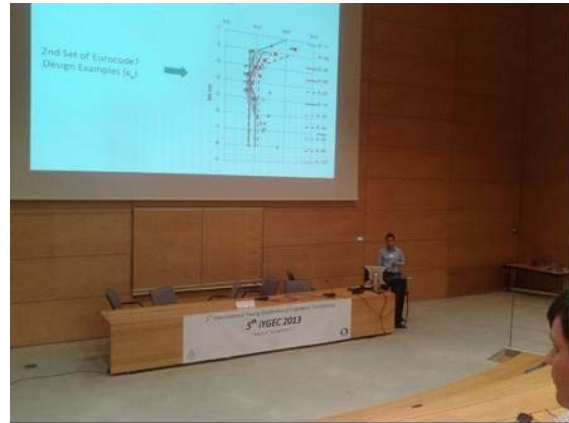


Photo 1 - During my presentation at 5th IYGEC



Photo 2 - With Prof. Jean Luis Briaud and Ani Kosho (Albanian participant from AGS) at 18th ICSMGE

### (16) Poklonskyi Sergii, State Enterprise “State Research Institute of Building Constructions”, Ukraine

The conference was attended by 162 invited delegates from 57 European countries who prepared their presentations. Former USSA countries represented by delegates from Ukraine, Russia, Belarus and Kazakhstan. Submission of reports occurred over two days, August 31 and September 1 at the university Ecole des Ponts ParisTech. The conference was divided into 8 sessions, 4 sessions a day. The sessions lasted for 75-90 minutes with breaks of 15-30 minutes and 90 minutes break for lunch. In general, excepting introductory and concluding part, it was presented a 30-minute report of the Organizing Committee, and a 30 -minute lecture from sponsors and 128 reports from delegates. Each of the delegates was given 10 minutes to report and 5 minutes for discussion. The official conference language was English. There have been 128 reports of delegates that made their presentations at the conference and were divided to several basic sections of Geotechnics: slope stability; laboratory tests ;improving soil; foundations; modelling; earthworks; tunnels and underground structures; field trials; behaviour of soils;



## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

earthquakes and geodynamics ;supporting structures; monitoring. Among the presentations selected for the report on the main conference:

- Franchesca Ceccato from Italy,
- Antonio Araujo Correia from Portugal.

And to report on the results of the youth conference:

- Gaston Quaglia from Argentina;
- David Lasey from Australia.

My presentation was entitled "Ways to improve the determination of deformation characteristics of soils under laboratory conditions".



Photo 1 - Conference Hall



Photo 2 - The Building

### (17) Billang Nyogog Serge Aurélien, Labogenie, Cameroun

The Fifth International Conference of Young Geotechnical Engineers (5iYGEC) organized by the French Committee of Soil Mechanics under the auspices of the International Society for Soil Mechanics and Geotechnical Engineering saw the participation of nearly 70 young geotechnical engineers. Approximately 57 countries on 5 continents were represented. The breakdown is as follows:

- 57% of Europe,
- 6% of North America,
- 5% of South America,
- 11% of Africa
- 19% of Asia,
- 2 % of Oceania.

I have had the privilege to be nominated by the Transnational Committee Geotechnical Africa (CTGA) to be one of the African representatives.

The conference began August 31, 2013 with a speech by the President and members of the organizing committee Prof. YU -JUN CUI, A. of Labourdonnaye Dr. Mestat, J. Nicks.

I attended as a young geotechnical engineer and presented my research on "INVESTIGATIONS ON ELASTIC MODULUS OF CRUSHED GRAVEL IN CAMEROON USING deflections". The venue was the Ecole des Ponts Paris-Tech, Marne- la-Vallée, France in the city of Paris.

The conference was held over two days. Three plenary sessions were held simultaneously in the amphitheater of the Ecole des Ponts. The research presented by young geotechnical engineers focused on the following topics: Slope Stability, Laboratory Testing, Ground Improvement, Foundations, Modeling, Earthworks, Tunnel and Underground Structure, In-Situ Testing, Soil Behavior, Earthquake and Geodynamics, Retaining Structures, Monitoring.

The conference provided a good atmosphere for profitable interactions and discussions through coffee breaks and lunch between the technical sessions.

Finally, I am very grateful vis-à-vis the ISSMGE Foundation for financial support that enabled me to attend the 5 iYGEC'13. I will not fail to express my gratitude to all those who are related to the Foundation donors through the ISSMGE President, ISSMGE Vice- President for Africa, the administration of ISSMGE and anyone else who contributed to the subsidy.

REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 1 - Photograph of myself in discussion after my presentation



Photo 2 - Family photograph

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

### (18) Stacey Tucker, Kansas State University, USA

The 18th International Conference on Soil Mechanics and Geotechnical Engineering was in Paris, France the first week of September in 2013. I applied for a grant from the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) while writing my PhD Dissertation at Texas A&M University. This conference provided the opportunity to attend the lectures of some of the current 'Greats' in Geotechnical Engineering and for the chance to expand ones professional network globally. Also, the location of the conference was enticing to gain some new cultural experiences.

The Great Amphitheater was a focal point of grand occasions, beginning with the opening statements from the President of the conference and the President of the society. The musical accompaniment of the opening session was certainly unique and a delightful component to excite the attendees for the week ahead. Following this, the opportunity to hear the Terzaghi, Ishihara, and Menard lectures in a row gave the audience stimulating and technical knowledge. In particular, I enjoyed Dr. Calabresi's Tuesday lecture on "The role of Geotechnical Engineering in saving monuments and historic sites" for the Kerisel Honor Lecture. Historic preservation is a rising field across many disciplines and I found that this lecture specifically addressed the theme of the conference: Challenges and Innovations in Geotechnics. Considering all of the Honor lectures in the Great Amphitheater, the theme of the conference was covered very well, from case studies to in situ testing methods, and numerical to physical models.

Outside the technical lectures and discussion groups, were plenty of opportunities for networking during the coffee breaks and lunch. With over 1,000 attendees, it was impossible to track down every colleague of interest, though the challenge of doing so was exciting! Fortunately, as a volunteer at the ISSMGE booth helping to disseminate information from each of the societies, I was able to visit with many colleagues and create new professional relationships. This provided the perfect opportunity to discuss up and coming events and topics as well as to gain invaluable advice as a new faculty member. Expanding my professional network internationally has allowed me to view some subjects with new perspective.

The final benefit of attending this conference was technical mixed with some culture. Because the conference began on Monday, this potentially provided attendees with just enough time to explore some of the sights of Paris. From an engineer's prospective, the opportunity to see and go up in the Eiffel Tower is a once in a lifetime experience. No picture does this structure justice, it is surprising how tall it is in person and a little daunting when looking down at Paris from the top. Also, the opportunity to briefly explore the Louvre, certainly one of the greatest museums in the World, was a sensational addition.

The benefits of attending the 18th International Conference on Soil Mechanics and Geotechnical Engineering will support my new career in many ways. The knowledge gained through the lectures and technical sessions and the professional networking will supplement a budding career in academia for many years. I look forward to the 19th International Conference in 2017.

### (19) Suganya Kuppusamy, Indian Institute of Science, Bangalore, India

18th ICSMGE was jointly organized by the French Society for soil mechanics and geotechnical engineering and ISSMGE. It's a once in four years event for the geotechnical community and this particular conference, 18th ICSMGE at Paris was so successful in contributing to the profession greatly. The theme of the conference was "Challenges and Innovations in Geotechnics" and the lectures, workshops and discussion sessions were precisely justifying the theme.

The conference started on 2nd September with the 8th Terzaghi Oration rendered by Dr. Suzanne Lacasse. The presentation was focused on case histories involving slope failures and various examples illustrating landslide risk management. Three honour lectures namely Ishihara Lecture by Prof. Gazetas G., Ménard Lecture by Prof. Briaud J.-L. and Bishop lecture by Prof. Richard Jardine were delivered on the same day. The second day of the conference started with the Kerisel lecture presented by Prof. Calabresi G. on the role of Geotechnical Engineers in saving monuments and historic sites followed by McClelland lecture delivered by Prof. Mark Randolph. Prof. Shackelford rendered Kerry Rowe lecture and he highlighted the role of contaminant transport by diffusion and the need for understanding it in the field of Geo-Environmental engineering. Prof. Malcolm Bolton delivered Schofield lecture in which he explained the potential use of physical modelling in envisaging the field behaviour with suitable examples. Three

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

special lectures and two best presentations selected from IYGEC'13 were also presented during the plenary sessions. The discussion forum on innovation and practice was highly motivating.

On 4th and 5th of September there were oral presentations of papers in parallel discussion sessions on a wide spectrum of topics in Geotechnical engineering. Poster presentations organized in parallel also aided in interaction and knowledge sharing with the fellow participants. Workshops organized by the TCs of ISSMGE provided immense opportunity for widening knowledge in various topics of geotechnical engineering. On the last day of the conference a field visit was organized and it helped me in learning about the geology of Paris.

The participation in the conference has enabled me learn from the leaders of the profession. The contacts gained and the discussions I had with professionals in my area of research have improved my vision and equipped me with new ideas to explore on. I would like to express my sincere thanks to ISSMGE foundation for providing financial support for participating and presenting in the conference.



Photo 1 - Indian team at ICSMGE, Paris 2013

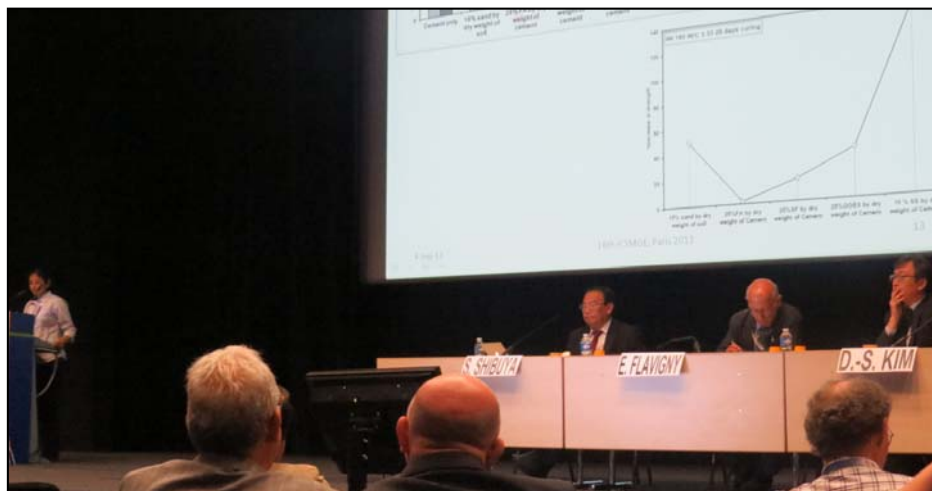


Photo 2 - During my presentation in TC 101, Session II (Strength properties and treated soils)

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 3 - With Prof. John Burland during the conference

### (20) Dr. Talal Awwad, Damascus University, Syria

The 18th International Conference on Soil Mechanics and Geotechnical Engineering (18th ICSMGE) which took place in Paris, France was hosted by the French Society for Soil Mechanics and Geotechnical Engineering (CFMS). The main theme of the Conference was “Challenges and Innovations in Geotechnics”. The five-day conference started with registration of the participants on the 2nd of September, 2013 and ended at 6th. The conference was flawlessly organized and relatively well attended.

The conference started on Monday September 2nd with opening session which was followed on 2nd and 3rd by Honour and Special Lectures in Great Amphitheatre. These important lectures was provided by Professors: S. Lacasse (Norway), G. Gazetas (Greece), J.L. Briaud(USA), A. Sim (France), R. Jardine (UK), F. Schlosser (France), G. Calabresi (Italy), M. Randolph (Australia), C. Shackelford (USA), V. Fluteaux (France) and M. Bolton(UK).

On Wednesday and Thursday September 4th and 5th, there were parallel sessions organized by the Technical Committees. These sessions took place in Blue Amphitheatre and other conference rooms in “Palace des Congres de Paris”. The presentations and questions in Technical committees were very interesting and covered wide diverse topics, such as Preservation of Historic Sites, Earthquake Geotechnical Engineering, Numerical Methods and Physical Modelling in Geomechanics, Transportation Geotechnics, Ground Improvement, Deep Foundations and many others. I made an oral presentation at ATC19 workshop on Historical Sites about Geotechnical Issues of Historical Buildings in Syria. Many questions came from audience of this ATC 19 workshop which was held under auspices of Prof. Yoshinori Iwasaki (Japan).

On Friday September 6th, there was a Workshop “Role of Geo-Engineering for Conservation of World Heritage” organized by ATC 19: Asian Regional Technical Committee for Cultural Heritage and Historical Site -which took place in World Heritage Centre, UNESCO. The opining lecture “World Heritage in Danger in Asian and Pacific Region” was provided by Mr. Fang Jing, Chief Asia and Pacific Unit, World Heritage Centre, UNESCO. I gave an invited lecture about The Role of Soil Improvement for Conservation of Syrian Historical Monuments.

This conference provided me an excellent opportunity to meet and talk to many professors from different countries and industry leaders in the field of geoen지니어ing. I was able to talk to many potential research collaborators and to be in touch with other researchers.

I would like to deeply thank ISSMGE Foundation for their award.

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo1 - During ISSMGE Council Meeting on September 1st, where I attended as the official representative of Order of Syrian Engineers and Architectures (OSEA)



Photo 2 - ISSMGE Board (2009-2013) at Closing Ceremony of 18th ICSMGE

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 3 - At ATC 19 -Historical Sites workshop in UNESCO with International Geo-Brains



Photo 4 - During time of Gala Dinner with new President of ISSMGE Prof. Roger Frank

## REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)

(21) Yelbek Uteпов, L.N. Gumilyov Eurasian National University in the City of Astana, Kazakhstan

The 5th International Young Geotechnical Engineers Conference (5th IYGEC), "Advances in Soil Mechanics and Geotechnical Engineering", was a very successful and unique experience. The conference was held at National School of Bridges and Roads (Ecole des Ponts ParisTech), Paris, France. There were more than 140 young participants from France, Kazakhstan, USA, UK, China, Japan, Germany, Canada, Korea, Russia, Singapore, Malaysia, Sweden, India, Taiwan, Italy, Austria, Australia, Norway, Spain, Belarus, Lebanon, Sudan, Turkey, Romania, Ukraine, Portugal, Netherlands, Poland, Hungary, South Africa, Brazil, Finland, Vietnam, Ireland, Iran, Egypt, New Zealand, Greece, Serbia, Argentina, Slovakia, Belgium, and Slovenia. This superior diversity of the participant pool has provided an excellent networking opportunity between young geotechnical engineers, world class experts, and those famous and leading scholars in the field.

According to the 5th IYGEC programme, I have been involved in participations in the first two days of the 18th International Conference on Soil Mechanics and Geotechnical Engineering (18th ICSMGE), "Challenges and Innovations in Geotechnics". The conference was held at the Paris International Conference Centre (Palais des Congres de Paris). The conference was attended by many participants. Most of them are well known professors and scientists from all over the world.

As a young geotechnical engineer and student, participation in these great events was a brilliant way for me to make contacts with leading and rising scholars in the geotechnical engineering society. I deeply appreciated the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) for providing me with this great opportunity to demonstrate leadership, build network, and exchange beneficial knowledge.

In short, I strongly believe that the benefits of attending these conferences are not limited to the time spent during the conference, but more decisively will be the strong connections that were built and bounded during the time I spent with all young rising participants, world class experts, and established scholars.

Finally, I have to express my deepest gratitude and appreciation to Prof. Askar Zhussupbekov (President of Kazakhstan Geotechnical Society, Eurasian National University, Astana, Kazakhstan) for his valuable support, encouragement, and guidance, without which the current study would not have been accomplished.

Once again, I must also acknowledge and thank the nomination of the Kazakhstan Geotechnical Society (KGS), as well as a generous grant from ISSMGE that enabled me to present my research in the 5th IYGEC. I would like to express sincere appreciation to the inspiration and encouragement for young geotechnical engineers of ISSMGE.



REPORTS TO ISSMGE FOUNDATION ON CONFERENCE ATTENDANCE (CONTINUED)



Photo 1 - The opening ceremony of the 5th IYGEC



Photo 2 - Yelbek Utepov (Ph.D. Student, Eurasian National University, Astana, Kazakhstan) giving his talk entitled "Simulation of single pile loading test in a centrifuge to predict its behaviour in real case" during the section-3 of Modelling (3c) with about 50 participants. This photo was taken on August 31, 2013.

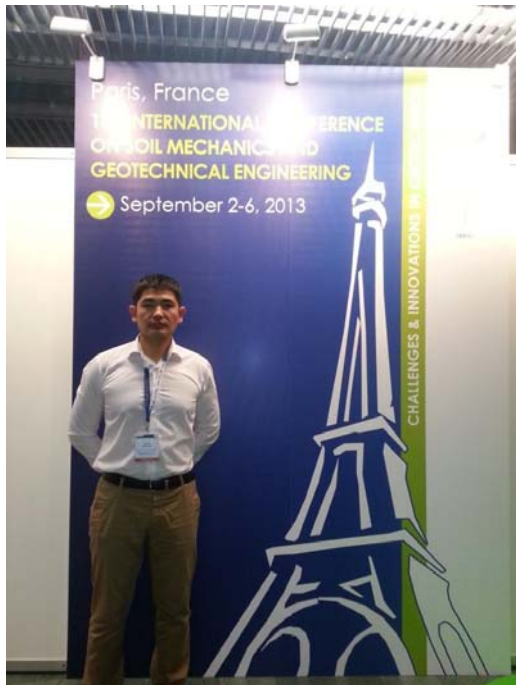


Photo 3 - Yelbek Utepov (Ph.D. Student, Eurasian National University, Astana, Kazakhstan) near the board of the 18th ICSMGE



Photo 4 - Memorable photo of Kazakhstan and USA delegates, participants of the 18th ICSMGE

## From the Soils and Foundations Journal

### *DVD for the Special issue on Geotechnical Aspects of the 2011 off the Pacific Coast of Tohoku Earthquake will be published in 2014*

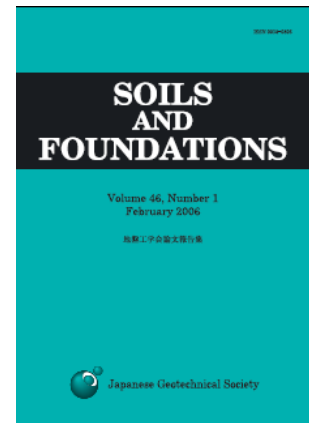
Japanese Geotechnical Society

On March 11, 2011, at 2:46 in the afternoon, an earthquake of moment magnitude 9.0 occurred with the focus off the Sanriku Coast. The earthquake was the largest in recorded history in Japan and was named “The 2011 off the Pacific Coast of Tohoku Earthquake” by the Japan Meteorological Agency. The Cabinet officially named this disaster the “Great East Japan Earthquake.”

We were published the October 2012 issue as the special issue which collects important articles, including a wide spectrum of case histories, on the disaster due to 2011 off the Pacific Coast of Tohoku Earthquake from geotechnical aspects. This Special Issue can be accessed for free via the following link:

<http://www.sciencedirect.com/science/journal/00380806/52/5>

In this time, we collect more articles, pictures and movies and re-edit this issue as DVD. It will be published in 2014. We receive a reservation for this DVD now. Please send us the order form on the other side of this leaf when you reserve it.



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## NEW BOOK by Hungarian Member Society

### GEOTECHNICAL COLLAPSES

#### (Understanding the problems and finding the solution)

This book has recently been published by the Hungarian Geotechnical Society (ISSMGE Hungarian National Committee) by Dr. József Mecsi as Editor. This book is a compilation of cases of physical damages, focusing on construction engineering and - essentially - demonstrating geotechnical problems, damages and solutions.

The initial base for the collection takes its origin from the content of the workshop organized in Budapest, September 2010 by ISSMGE TC 302, the Forensic Geotechnical Engineering Committee with the title "Failures, Disputes, Causes and Solutions in Geotechnics".

It is the aim of this book to teach and give a lesson to practicing engineers, university students and other related professionals, to give a kind of guidance and generate recognition with the intention of supporting better and more professional works, emphasizing the necessity of deeper understanding and analysis of the direct and indirect reasons as well as the real nature of damage problems. However, this compilation is not targeting to show up "scapegoats" with presumption of responsibility in any cases mentioned here.

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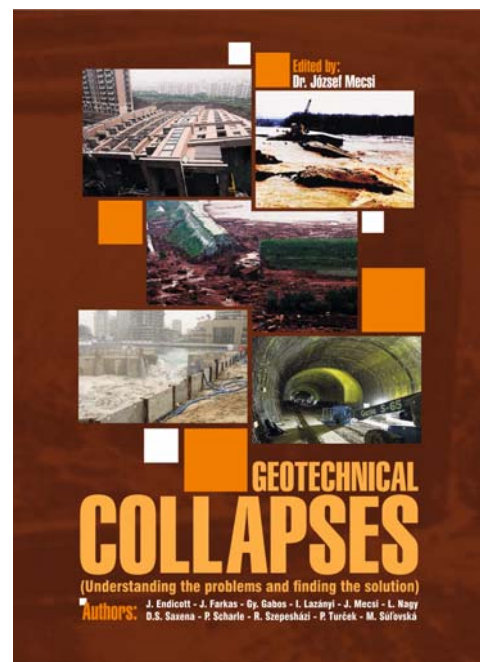
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## NEW BOOK by Hungarian Member Society

# GEOTECHNICAL ENGINEERING EXAMPLES AND SOLUTIONS USING THE CAVITY EXPANSION THEORY (Pressuremeters, piles, grouted anchors)

The book's primary area of investigation is the modelling of cavity expansion in soil, which represents one of the most significant fields of geotechnical research. This field of research includes issues pertaining to soil stress and change of density around piles and injected soil anchors on the one hand, and to in situ pressuremeter tests determining the material laws of different soil types and the resistance of soil in a given condition on the other hand.

The first part of the book raises questions to which practicing geotechnical engineers expect useful and verifiable answers. Next an overview is given of basic terms related to the rigidity and stability of soils and a detailed and analytical presentation is offered, along with critical remarks, of the background and history of the theoretical examination of cavities expanded in soil based on the professional literature of this area.

The work describes, through examples, the distribution of stresses, specific soil compactions and volume changes as a function of loading around a cylinder expanded and contracted in soil.

The author elaborates on one of the major in-situ soil tests, the pressuremeter soil test method and the relevant international regulations. Based on a model, the book displays ways of determining the properties of soils in terms of shear strength and deformation, and it shows similarities between pressuremeter tests and pile models, as well as the convertibility of measurement curves. Furthermore, spreadsheets are used to give examples for the determination of material property combinations.

The largest part of the book engages in the discussion of the behaviour of pile foundations under loads. First an outline is given of the regulation system set up in line with the Eurocode 7 design code, following which a detailed description is offered of correlations between the pile base resistance and the volume of pile displacement at the pile base by determining the volume of soil compaction under the pile base.

A method of determining the shaft friction of piles is presented through a strength mobilisation process deduced from the relative displacement differences between the pile and the soil.

Special attention is given in the book to the determination of the highest possible area of compaction and the possible effects of technological processes.

The last chapter of the book engages in the determination of the load bearing capacity and the tension load - tension strain curve of injected soil anchors.

When presenting the complex stress - volume change - macro deformation conditions of the building structures under examination as a function of loading, the author illustrates his arguments with coloured figures and a most thorough description and explanation of the background of the calculations.

The theoretical explanations are supported by a detailed presentation of practical examples. The examples selected are based on verifiable measurement data published in papers based on earlier research programmes.

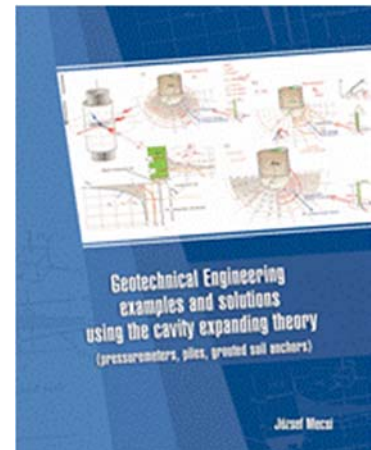
Excel-based software programmes, which were developed using the examples presented in the book, help practicing engineers to solve similar problems.

This book will serve as a source of inspiration for further research programmes, and also as a useful starting point for other fields of geotechnical engineering.

The Hungarian member society is proud of the recommendation of this book made by Prof. Roger Frank, the ISSMGE President.

You can order on the website:

<http://www.kontraszt.hu/en/webshop/engineer/cavity-detail>, E-mail: [info@kontraszt.hu](mailto:info@kontraszt.hu).



## New journal: *Transportation Geotechnics*



We are delighted to announce the launch of a new journal, *Transportation Geotechnics*, published by Elsevier. The editors of the journal are Professors António Gomes Correia, Erol Tutumluer and Yunmin Chen.

The journal will offer a rapid peer review, and articles will be published in an issue within 6 weeks of acceptance. The journal will be hosted on ScienceDirect and all papers published in the first volume (2014) will be freely available.

### Why the need for *Transportation Geotechnics*?

Geotechnical Engineering greatly influences the alignment, planning, design, construction, performance and maintenance of all traffic and transportation arteries. Quality, serviceability, maintenance and life-time of roads, railways, airfields, waterways and ports, depend, to a large extent, on the geotechnical properties of these multi-layered structures and foundations (natural ground, embankment and subgrade). All these aspects should be considered a broad engineering unit bridging the gap between Pavement/Railway Engineering and Geotechnical Engineering.

### Aims and Scope

*Transportation Geotechnics* provides a forum for the publication of original research relating to new developments in the applications of geotechnical and geoenvironmental aspects in design, construction, maintenance, and rehabilitation of roads, railways, airfields and waterways from around the world.

Read the guide for authors and submit your article at [www.elsevier.com/locate/trgeo](http://www.elsevier.com/locate/trgeo).

We look forward to your involvement with the journal.

António Gomes Correia

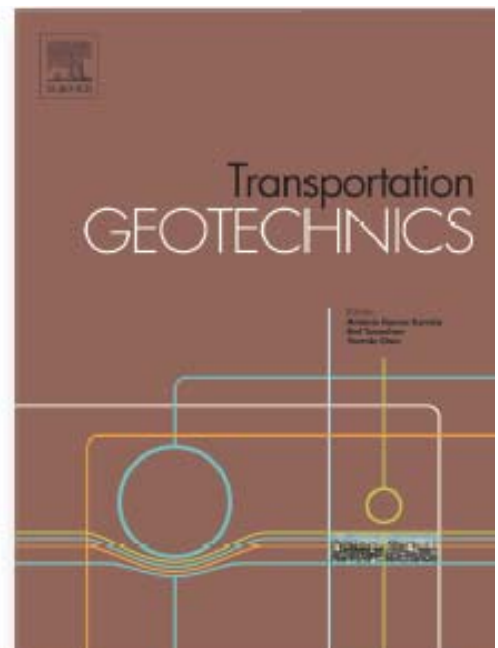
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## NEWS ON RECENT CONFERENCE

### THE 5TH KOREA-JAPAN GEOTECHNICAL WORKSHOP

Hyun CHO  
Yoichi WATABE

Under the success of previous workshops (the 1st Workshop in Seoul, Korea, in 1990, the 2nd Workshop in Tokyo, Japan, in 2008, the 3rd Workshop in Ansan, Korea, in 2010, and the 4th Workshop in Kobe, Japan, in 2011), the 5th Korea-Japan Geotechnical Workshop took place in Seoul, Korea, from 17th to 18th October 2013. It attracted 50 participants (30 from Korea and 20 from Japan) and 24 papers were presented in four sessions on the first day.

Session 1: Soil Dynamics and Geotechnical Earthquake Engineering / Dams and Levees / Energy, Plant and Geoenvironmental Engineering

Session 2: Ground Excavation

Session 3: Foundations

Session 4: Ground Investigation / Slopes / Tunnel / Soft Ground Improvement

On the second day of the workshop, a technical tour was organized to visit Incheon Bridge and Gyeong-In ARA Waterway. The next workshop of this series will be hosted in Fukuoka, Japan, in the year of 2015.

Photographs taken during the conference are shown in what follows.



Photo 1 Presentation during the workshop



Photo 2 Discussion during the workshop



Photo 3 Technical tour at Incheon Bridge



Photo 4 Technical tour at Gyeong-In ARA Waterway

## NEWS ON RECENT CONFERENCE

### International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures

Bologna, Italy, 14-16 October 2013

The symposium was held in Bologna, Italy, to honor the research achievements of Prof. Dov Leshchinsky of the University of Delaware (USA). Dr. Leshchinsky is a world-renowned geotechnical researcher and educator in the design and practice of geosynthetic-reinforced soil structures.

The event took place for three days (14-16 October, 2013) with the first two days held at the School of Engineering and Architecture, Bologna University (Italy). The third day of symposium included joint sessions with the 26th Italian National Conference on Geosynthetics at Sala Topazio, close to SAIE Building Innovation Exhibition Center.

A total of 71 papers were selected for oral presentation. These papers have been reviewed and published in a hardcopy (751 pages, by DEStech Publications, Inc.) as well as digital version of proceedings. Limited number of copies are available (contact Hoe Ling about the cost).

Over 110 participants from more than 34 countries have participated in the symposium. The symposium consisted of several main technical sessions, as follows:

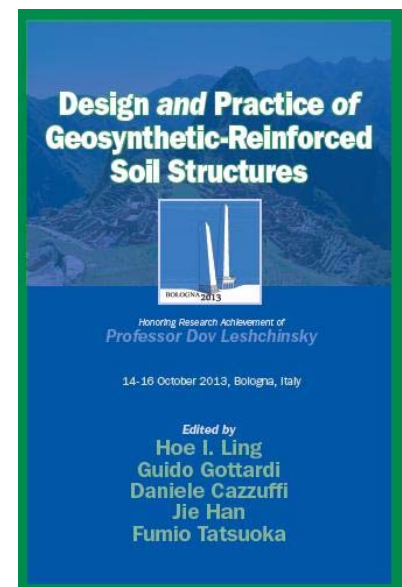
- Laboratory Testing and Physical Modeling
- Wall/Slope Design and Construction
- Pavement and Footing
- Bridge and Vertically Loaded Structure
- Embankment, Soft Ground and Geosynthetic Tube
- Application of Numerical Methods
- Case Studies of Wall/Slope and Embankment
- Case Studies of Off-shore, Road and Railway Construction

The following seven keynote lectures were delivered by the international experts:

- Leshchinsky, D. (USA): Framework for limit state design of geosynthetic-reinforced walls and slopes
- Cazzuffi, D. (Italy): Geosynthetics engineering and vegetation growth in soil reinforcement applications
- Collin, J.G. (USA): Shored MSE walls research to practice
- Koseki, J. (Japan) and Shibuya, S. (Japan): Mitigation of disasters by earthquakes, tsunamis and rains by means of geosynthetic-reinforced soil retaining walls
- Tatsuoka, F. (Japan): The importance of good compaction of the backfill and the compaction control based on the dry density and the degree of saturation
- DiMaggio, J.D. (USA): Geosynthetic-reinforced soil walls and slopes: Best practices in design and construction and reality: Why they differ
- Moraci, N. (Italy): Soil-geosynthetic interaction: Design parameters from experimental and theoretical analysis



Prof. Dov Leshchinsky delivering the special lecture



Conference Proceedings



## NEWS ON RECENT CONFERENCE

### International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures (CONTINUED)

Several of the keynote papers will appear in early 2014 in a forthcoming issue of the journal of *Transportation Infrastructure Geotechnology* (published by Springer); <http://www.springer.com/engineering/civil+engineering/journal/40515>

In addition to the technical presentations, several social events were organized. A welcome reception was offered in the first evening inclusive of a music concert featuring operatic excerpts by well-known 19th-century Italian composers. A banquet was organized in the second evening at Palazzo Isolani, which is one of the most beautiful and important historical buildings in Bologna. During the third day, participants were offered an opportunity to visit the SAIE Building Innovation Exhibition located near the conference venue.



Group photo taken at the School of Engineering and Architecture, Bologna University  
(Photo Credit: Ben Leshchinsky)

## NEWS ON RECENT CONFERENCE

International Symposium on  
Design and Practice of Geosynthetic-Reinforced Soil  
Structures (CONTINUED)

Organizing committee and Italian committee members during the closing ceremony at Sala Topazio



Dov and Ora Leshchinsky greeted by Askar Zhussupbekov, immediate past Vice President of ISSMGE for Asia, inside Palazzo Isolani

## NEWS ON RECENT CONFERENCE

### International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures (CONTINUED)

The symposium was held under the auspices of the International Geosynthetics Society, the Italian Geotechnical Association, the Italian Chapter of IGS, the International Society of Soil Mechanics and Geotechnical Engineering (TC 101 & TC 305), the American Society of Civil Engineers Geo-Institute, Department of Civil, Chemical, Environmental and Materials Engineering of the University of Bologna, University of Delaware, and several Japanese research institutes (Public Works Research Institute, Railway Technical Research Institute and National Institute for Rural Engineering).

A total of fourteen leading firms participated as industrial sponsors (in alphabetical order): ACE Geosynthetics, ADAMA Engineering, Allan Block, Callide Technologies, Inc, Huesker Synthetic GmbH, Intergeo Services, Micheletto Pavimentazioni, Officine Maccaferri S.P.A, NAUE GmbH & Co. KG, Risi Stone Systems, TeMa Technologies and Materials srl, TENAX, TenCate Geosynthetics Asia Sdn Bhd, and Tensar International Corporation. The industrial supports helped to reduce significantly the registration fee while upholding the highest quality of the symposium.

Conference website <http://www.columbia.edu/cu/civileng/bologna2013/>

Reported by Hoe I. Ling, Guido Gottardi, Daniele Cazzuffi, Jie Han, and Fumio Tatsuoka.

## NEWS ON RECENT CONFERENCE

### CTGS GEOTECH2013 -

### The 15th Conference on Current Researches in Geotechnical Engineering in Taiwan, September 11-13, 2013

Prof. Muhsung Chang, NYUST/CTGS, Taiwan

CTGS Geotech-Conference (the conference on current researches in geotechnical engineering in Taiwan) is a biannual national event in the geotechnical society of Taiwan. Geotech2013 was the 15<sup>th</sup> conference of the series that was taken place at the Prince Hotel of Janfusun Amusement Park, Yunlin County, Taiwan, on September 11-13, 2013. This conference was organized by the Construction Engineering Department of National Yunlin University of Science & Technology (NYUST), under the auspices of Chinese Taipei Geotechnical Society (CTGS), National Science Council (NSC) of Taiwan, and Chinese Institute of Civil and Hydraulic Engineering (CICHE) in Taiwan.

A total count of participants in this conference had reached around 400, a majority of which came from academia, governmental agencies, and private sectors in Taiwan, and some came from Japan, Hong Kong, America, and Australia. The conference received about 300 technical papers. After a prudent reviewing process, 220 papers were finally accepted for presentation and included in the conference proceedings.

The main theme of this conference was “*the Advances and Challenges in Geotechnical Engineering,*” which outlined the progress in the current stage of geotechnical studies, as well as difficulties and opportunities faced in the future. The conference was further divided into 12 sub-themes, including: (1) landslides and debris flows, (2) ground subsidence and soil liquefaction, (3) underground excavations and retaining structures, (4) foundation design and construction, (5) seepage flows and erosions, (6) rock mechanics and tunnel engineering, (7) soil properties and behaviors, (8) geosynthetic materials and applications, (9) subsurface explorations and ground motoring techniques, (10) risk assessment and performance-based design, (11) environmental protection and sustainable development, and (12) engineering education and ethics. Photos 1 & 2 show the venue and the greeting area in this conference.



Photo 1. Flags along the access road to conference venue (lower right: Prince Hotel, Janfusun Amusement Park, Yunlin, Taiwan).



Photo 2. Greeting area (left to right: Dr. ZC Moh, Prof. JK Mitchell, & Prof. I Towhata).

The opening ceremony started in the early afternoon of 9/11 and was chaired by Prof. YS Fang / President of CTGS (Photo 3). Several honorable guests were invited to give their congratulatory addresses, including: Prof. CK Hou / President of NYUST, Prof. Ikuo Towhata / ISSMGE VP for Asia (Photo 4), Dr. BH Lai / Vice Director of Water Resources Agency in Taiwan, Dr. CR Chiang / Director of Central Geology Survey in Taiwan, and Dr. DJ Tseng / Director General of Taiwan Area National Expressway Engineering Bureau. Photo 5 shows the group picture of participants in the main conference room.

## NEWS ON RECENT CONFERENCE

## CTGS GEOTECH2013 -

## The 15th Conference on Current Researches in Geotechnical Engineering in Taiwan, September 11-13, 2013 (CONTINUED)



Photo 3. Opening ceremony chaired by Prof. YS Fang (President of CTGS).



Photo 4. Congratulatory address by Prof. Ikuo Towhata (VP for Asia, ISSMGE).



Photo 5. Synthesized group picture of participants in the main conference room.

CTGS Geotech2013 Conference had invited several internationally renowned keynote speakers, including Prof. James K. Mitchell (Karl Terzaghi Lecturer of 1984, Rankine Lecturer of 1991, National Academy of Engineering of 1976, and National Academy of Sciences of 1998) and Prof. Fumio Tatsuoka (ISSMGE VP for Asia in 2001-2005, and IGS President in 2006-2010).

Prof. Charng-Hsein Juang, Glenn Professor of the Glenn Civil Engineering Department at Clemson University, South Carolina, USA, was the recipient of 2013 CTGS Geotechnical Award and delivered his Geotechnical Lecture entitled "*Robust Geotechnical Design - Methodology and Applications*," a new design approach that explicitly considers design robustness against the variation of uncertainties in geotechnical parameters. Prof. Juang announced for the first time this work to the geotechnical society of the world in this conference (Photo 6).

Prof. James K. Mitchell delivered his keynote lecture in this conference with the title "*A Look at the Future of Geotechnical Engineering*," providing a thorough review of past achievements and an enlightening vision on future developments in the geotechnical engineering. Prof. Mitchell's speech had been influential to geotechnical researchers, students, and practitioners in Taiwan, and would believe to make an important step to direct the growth in geotechnical engineering in the future (Photo 7).

## NEWS ON RECENT CONFERENCE

## CTGS GEOTECH2013 –

## The 15th Conference on Current Researches in Geotechnical Engineering in Taiwan, September 11-13, 2013 (CONTINUED)



Photo 6. Prof. Charng-Hsein Juang delivered 2013 CTGS Geotechnical Lecture (lower left: CTGS President YS Fang presented 2013 CTGS Geotechnical Award to Prof. CH Juang).



Photo 7. Prof. James K. Mitchell delivered his Keynote Lecture in CTGS Geotech2013 Conference (lower left: Keynote Lecture Chair Dr. ZC Moh provided a Thank-You Gift to Prof. JK Mitchell).

Prof. Fumio Tatsuoka addressed “*Recent Geosynthetic-Reinforced Soil Structures for Railways in Japan*” in his keynote lecture, with emphasis on the application of geosynthetic-reinforced structures for the design for tsunami attacks due to earthquakes. His presentation consisted of an important summary on results of several recent studies after the devastating earthquake of Japan in March 2011 (Photo 8).

The fourth keynote lecture was given by Prof. Ching-Chuan Huang of National Cheng Kung University of Taiwan. Prof. Huang talked with a subject on “*Formulation and Verifications of Force-Equilibrium-Based Finite Displacement Method (FFDM) for Slope Stability Analysis*,” a novel approach for stability analysis of slopes which was proposed for its first time in this conference (Photo 9).

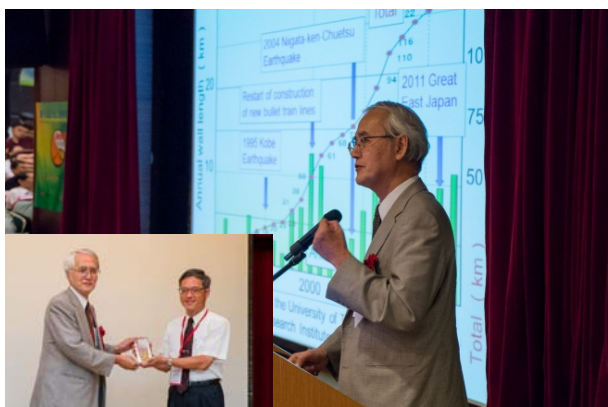


Photo 8. Prof. Fumio Tatsuoka delivered his Keynote Lecture in CTGS Geotech2013 Conference (lower left: Keynote Lecture Chair Prof. SS Lin provided a Thank-You Gift to Prof. F Tatsuoka).



Photo 9. Prof. Ching-Chuan Huang delivered his Keynote Lecture in CTGS Geotech2013 Conference (lower left: Keynote Lecture Chair Prof. Joe Ueng provided a Thank-You Gift to Prof. CC Huang).

## NEWS ON RECENT CONFERENCE

### CTGS GEOTECH2013 –

### The 15th Conference on Current Researches in Geotechnical Engineering in Taiwan, September 11-13, 2013 (CONTINUED)

The fifth keynote lecture was provided by Dr. Hsui-Sheng Hsieh, President of Trinity Foundation Engineering Consultants Inc. in Taiwan. From a practical standpoint, Dr. Hsieh discussed an important issue on the “*System Stiffness for Deep Excavations in Soft Clays*,” by considering the combined effect of bracing stiffness and flexural rigidity of retaining structures in a deep excavation analysis (Photo 10).

The sixth keynote lecture was delivered by Dr. Barry S. Chen, a senior principal of Hart Crowser Inc. in Seattle, USA, on the topic of “*Geotechnical Analysis for Static Liner Design of the World’s Largest Diameter Soft Ground Bored Tunnel in Downtown Seattle*.” Dr. Chen discussed an interesting project that involves construction of State Route (SR) 99 Tunnel to replace the existing SR Alaskan Way Viaduct in the city of Seattle (Photo 11).



Photo 10. Dr. Hsui-Sheng Hsieh delivered his Keynote Lecture in CTGS Geotech2013 Conference (lower left: Keynote Lecture Chair Dr. SM Woo provided a Thank-You Gift to Dr. HS Hsieh).

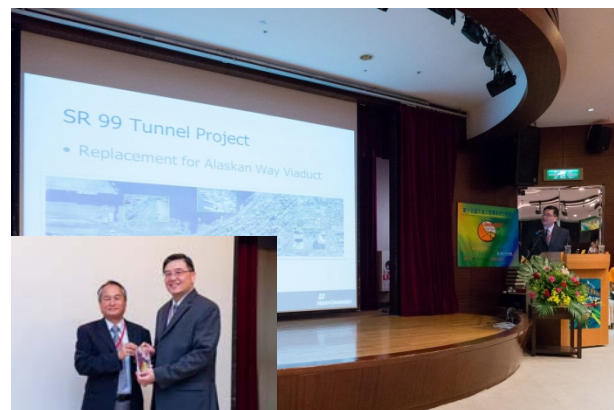


Photo 11. Dr. Barry S. Chen delivered his Keynote Lecture in CTGS Geotech2013 Conference (lower left: Keynote Lecture Chair Prof. YM Tien provided a Thank-You Gift to Dr. BS Chen).

Prof. Ikuo Towhata, ISSMGE VP for Asia, announced in this meeting the 15<sup>th</sup> Asia Regional Conference on Soil Mechanics and Geotechnical Engineering (15ARC), that will be held by Japanese Geotechnical Society (JGS) in Fukuoka, Kyushu, on November 9-13 of 2015. Details of the conference are referred to the following website: <http://www.jgskyushu.net/uploads/15ARC/> (Photo 12).

## NEWS ON RECENT CONFERENCE

## CTGS GEOTECH2013 –

## The 15th Conference on Current Researches in Geotechnical Engineering in Taiwan, September 11-13, 2013 (CONTINUED)



Photo 12. Prof. Ikuo Towhata promoted the 15ARC Event to attendees of the conference.



Photo 13. Day-1 Welcome Dinner in the CTGS Geotech2013 Conference.

In CTGS Geotech2013 Conference, we also arranged two special sessions discussing important geotechnical issues in the mid-west region of Taiwan where the conference was situated. The issues were: (1) ground subsidence and soil liquefaction problems in Chuoswei River Alluvial Plain, and (2) landslide and debris flow problems in Tsaolin and Huashan areas in the western hillside of Central Mountain Range of Taiwan. Each session had involved five invited specialists in the fields of interest. At the end of Day 1, Geotech2013 offered a Welcome Dinner to the participants at the conference venue (Photo 13).

A total of 20 oral sessions, including 120 accepted papers, was arranged in the meeting rooms of the venue. Four parallel sessions were scheduled simultaneously and started from the noontime of Day 2 (Photo 14). Four poster sessions, including 100 accepted papers, were designated in an area along the hallway of the four meeting rooms (Photo 15). Ten exhibition booths were joined by companies of geo-material suppliers, engineering software, and testing equipment, etc., from domestic and overseas (Photo 15).



Photo 14. Oral presentations in one of the meeting rooms in the CTGS Geotech2013 Conference.



Photo 15. Lower right: poster presentations; upper left: exhibition booths in the conference.



## NEWS ON RECENT CONFERENCE

## CTGS GEOTECH2013 –

## The 15th Conference on Current Researches in Geotechnical Engineering in Taiwan, September 11-13, 2013 (CONTINUED)

Dinner Banquet (Geotech Night) of Geotech2013 Conference was scheduled in the evening of Day 2. The dinner was traditionally the most important “activity” in a 3-day conference, including Chinese-style round table foods and wines, as well as on-stage shows. To host this conference, students of NYUST had prepared a variety of performances to entertain the participants of conference. The shows had included light band, Chinese strings, tangos, choir, and hot dance, etc. (Photos 16 & 17).



Photo 16. Day-2 Dinner Banquet (Geotech Night) in CTGS Geotech2013 Conference.



Photo 17. Performances of Chinese orchestra and tangos in Day-2 Dinner Banquet (Geotech Night).

In CTGS Geotech2013 Conference, we had arranged two site visits to areas within a short distance to the venue to provide participants of the conference an opportunity to explore local culture activities and engineering problems in this area. The first tour (Day-2 afternoon) was to visit a Chinese Puppet Museum and its surroundings in Huwei Township, and to visit a ground subsidence site in the nearby of Huwei Township that is currently the most serious settlement spot along the entire length of Taiwan High Speed Rail (Photo 18). The second tour (Day-3 morning) was to visit a landslide site in Tsaolin and a debris flow area in Huashan. The hill slope of Tsaolin had been slid several times in the history, in which the most serious one was occurred during the attack of Chi-Chi (921) Earthquake of 1999. The sliding mass was estimated approximately  $120 \times 10^8 \text{ m}^3$ , the largest one that has been documented in Taiwan (Photo 19).



Photo 18. Site Visit 1 - Huwei Cultural & Technical Trip (Huwei-Tuku ground subsidence area).



Photo 19. Site Visit 2 - Tsaolin & Huashan Field Trip (Tsaolin 921EQ Landslide Area).

## NEWS ON RECENT CONFERENCE

### CTGS GEOTECH2013 –

### The 15th Conference on Current Researches in Geotechnical Engineering in Taiwan, September 11-13, 2013 (CONTINUED)

The CTGS Geotech2013 Conference had finally come to an end on September 13. It has been a successful and fruitful meeting in the history of CTGS Geotech-series conference in Taiwan, in terms of the number of participants, the number of papers being accepted, the renowned keynote speakers being invited, and the various programs and activities being arranged, etc. CTGS Geotech2013 Conference has tried one-step further to make the Geotech-series conference more international-wise by promoting exchanges in the engineering experience and research results between Taiwan and other countries in the world. More information of the CTGS Geotech2013 Conference can be found in the following websites:

- (1) <http://www.geotech2013.yuntech.edu.tw>, and
- (2) <http://www.flickr.com/photos/101221116@N02/sets/>.

## NEWS ON RECENT CONFERENCE

### New Zealand – Japan Workshop on Soil Liquefaction during Recent Large-Scale Earthquakes

A/Prof Rolando P Orense (University of Auckland, NZ)

The 2010-2011 Canterbury earthquakes in New Zealand and the 2011 off the Pacific Coast of Tohoku Earthquake in Japan have caused significant damage to many residential houses due to varying degrees of soil liquefaction over a very wide extent of urban areas unseen in past destructive earthquakes. Although these earthquakes caused extensive damage to life and property, they also serve as an opportunity to understand better the response of soil and building foundations to such large-scale earthquake shaking. With the wealth of information obtained in the aftermath of both earthquakes, information-sharing and knowledge-exchange are vital in achieving liquefaction-proof urban areas in both countries. Data regarding the observed damage to residential houses as well and the lessons learnt and current research on the topic of liquefaction are essential for the rebuilding efforts in the coming years and in mitigating buildings located in regions with high liquefaction potential.

As part of MBIE-JSPS collaborative research programme, the Geomechanics Group of the University of Auckland and the Geotechnical Engineering Laboratory of the University of Tokyo co-hosted a workshop to bring together researchers to review the findings and observations from recent large-scale earthquakes related to soil liquefaction and discuss new research results and possible measures to mitigate future damage. This workshop was held at the Faculty of Engineering building, University of Auckland, New Zealand on December 2 - 3, 2013. This event, which was attended by more than 80 researchers, engineers and practitioners from the local industry, involved invited presentations from 20 soil liquefaction experts from Japan, the United States, Chile and New Zealand. The highlight of the workshop was the two discussion sessions, one at the end of each day, which focused on current soil liquefaction issues, such as soil/site characterisation, liquefaction susceptibility and triggering, liquefaction-induced ground deformations, effects on structures and countermeasures. The final workshop proceedings will be published by CRC Press / Taylor & Francis Ltd in mid-2014.

Photographs taken during the workshop are shown below.



Photo 1 Group photograph of participants

## NEWS ON RECENT CONFERENCE

### New Zealand – Japan Workshop on Soil Liquefaction during Recent Large-Scale Earthquakes (CONTINUED)



Photo 2 Prof. S Yasuda (Tokyo Denki University) delivering his invited presentation



Photo 3 Prof. M Cubrinovski (University of Canterbury) delivering his invited presentation



Photo 4 Prof. R Boulanger (UC Davis) leading one of the discussion sessions



Photo 5 View of the workshop



Photo 6 Exchanging pleasantries during the tea break.



Photo 7 Prof I M Idriss (UC Davis) giving a speech during the workshop dinner

## NEWS ON RECENT CONFERENCE

### International Symposium on Advances in Foundation Engineering (ISAFE 2013), Singapore, 5-6 Dec 2013

The International Symposium on Advances in Foundation Engineering (ISAFE 2013) was successfully held in conjunction with the Sixth Annual General Meeting of the Geotechnical Society of Singapore (GeoSS) in Singapore between 5 and 6 Dec 2013. ISAFE2013 was organized by the Geotechnical Society of Singapore, the National University of Singapore, and the Building and Construction Authority. The symposium was chaired by Professor Kok-Kwang Phoon (National University of Singapore) and Er. Tong Seng Chua (President, GeoSS).

GeoSS organizes a thematic international conference every 2 years as a highlight event to advance knowledge in a topical issue in geotechnical engineering. The purpose of this international symposium is to gather designers, consultants, contractors, regulators, researchers and other stakeholders together in a single forum to address all aspects of foundation engineering, including present state of art/state of practice and challenging issues facing the profession. The basic goal is to share information on how to do the job most effectively with lowest risk and impact on the environment.

The proceedings contain 50 papers from 15 countries (Australia, Canada, China, Egypt, Germany, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, Singapore, Taiwan, Turkey, and United States). Contributions in this proceedings covered topics such as modelling and analysis, design, ground improvement, load test, and case studies. The symposium was opened by Er. Tong Seng Chua (President, GeoSS), Er. Keat Chuan Chew (Building and Construction Authority, Singapore), and Professor Ikuo Towhata (ISSMGE Vice President for Asia). Highlights of the symposium include a special session on "Singapore Piling Practice" organized by the GeoSS Piling Group, two special sessions organised by our young engineers from Student and Young Geotechnical Society of Singapore (SYGeoSS), TC212 (Deep Foundations) committee meeting (chaired by Professor Rolf Katzenbach), and the following keynote/special lectures:

#### Keynote Lectures

1. Independent Peer Review as a Guarantee for Safety, Serviceability and Optimization of Deep Foundation Systems (Rolf Katzenbach and Steffen Leppla)
2. Some Observations on Resistance Factors and Foundation Capacity in Reliability-Based Design (Fred H. Kulhawy)
3. Effect of Installation of New Foundations on Adjacent Piles (Yean Khaw Chow, Z. Chen, K. K. Tho and C. F. Leung)
4. Tall Tower Foundations - From Concept to Construction (Chris Haberfield)
5. Foundation Design and Construction in Limestone Formation: A Malaysian Consultant's Experience (Tan Yean-Chin and Chow Chee-Meng)
6. Settlement Estimation for Foundations of High-Rise Buildings in Singapore (Teoh Yaw Poh and Tiong Guan Ng)
7. Three-Dimensional Centrifuge and Numerical Investigation of the Performance of Piled Foundations Subjected to Deep Excavation (Charles W. W. Ng and S. Y. Peng)
8. Implications for Design of Piled Raft Foundations Subjected to Lateral Loading (Tatsunori Matsumoto)

#### Special Lectures

1. Experimental Validation of Relationship Between Particle Movement and Ageing Effect in Liquefaction Resistance of Sand (Yuki Shintaku and Ikuo Towhata)
2. Performance and Analysis of Non-Conventional Uplift Piles in Soft Ground (Maosong Huang, Jiangu Qian and Chenrong Zhang)

The Sixth GeoSS Annual General Meeting was held before the conference banquet on 5 Dec and Dr. Tiong Guan Ng (Golder Associates) was elected as the President for GeoSS (2014-2015). Professor Kok-Kwang Phoon delivered the closing address for ISAFE2013 on 6 Dec.

**NEWS ON RECENT CONFERENCE**

**International Symposium on Advances in Foundation Engineering (ISAFE 2013), Singapore, 5-6 Dec 2013  
(CONTINUED)**



Welcome Address by Tong Seng Chua, President of GeoSS



ISAFE2013 Delegates

NEWS ON RECENT CONFERENCE

International Symposium on Advances in Foundation Engineering (ISAFE 2013), Singapore, 5-6 Dec 2013 (CONTINUED)



Keynote lecture by Prof Rolf Katzenbach



Special Lecture by Prof I. Towhata, ISSMGE Vice President for Asia

NEWS ON RECENT CONFERENCE

International Symposium on Advances in Foundation Engineering (ISAFE 2013), Singapore, 5-6 Dec 2013  
(CONTINUED)



Editors of ISAFE2013



Secretary of TC212 Deep Foundations, Prof Dr. Deepankar Choudhury



## NEWS ON RECENT CONFERENCE

### International Symposium on Advances in Foundation Engineering (ISAFE 2013), Singapore, 5-6 Dec 2013 (CONTINUED)



Special session on Singapore Piling Practice



Closing Ceremony by Chair of ISAFE2013, Prof KK Phoon

## UPCOMING CONFERENCE

## 3rd International Symposium on Frontiers in Offshore Geotechnics (ISFOG 2015) OSLO 10-12 June 2015



The Norwegian Geotechnical Institute (NGI) is pleased to invite participation in the 3rd International Symposium on Frontiers in Offshore Geotechnics (ISFOG) to be held in Oslo, Norway on 10-12 June 2015. This symposium will continue the aims of the previous symposia held in 2005 and 2010 at The University of Western Australia.

The observed geotechnical performance of offshore structures has been a topic of discussion for many years. With ever-increasing structural optimization and greater emphasis on reliability and performance-based design, our need to better predict the observed geotechnical performance of structures has never been greater. In this respect, experience from field and model testing of offshore structures is vital. Submission of articles addressing these focus areas is therefore encouraged.

**Submissions are invited relating to advances of the following themes (see website for full list):**

- In situ and laboratory testing
- Multi-disciplinary site investigations: integration of geology, geophysics and geotechnics
- Geohazards and challenging soil conditions (including earthquakes and drilling hazards)
- Geotechnical challenges in Arctic environments
- Soil characterization, constitutive modelling and analysis procedures
- Shallow, caisson and pile foundation technology
- Reliability-based and performance-based geotechnical design for offshore installations
- Anchors for floating structures
- Pipeline/riser-soil interaction (including pipeline/cable installation)
- Well and conductor geotechnics
- Observed geotechnical performance of offshore structures
- Subsea earthworks
- Geotechnical aspects of decommissioning offshore structures
- Developments in rules and regulations

### 3rd McClelland Lecture

The 3rd McClelland lecture, organized by ISSMGE TC209, will be presented by Knut H. Andersen.

### Abstract submission

Prospective authors are invited to submit one-page abstracts, not exceeding 300 words, which should include the title of the article, names(s) and affiliations of the author(s), postal and electronic addresses, and three keywords. Abstracts can be submitted by post, fax or e-mail (preferred).

**Abstract due: 28 February 2014**

**Manuscript due: 31 July 2014**

**Camera-ready manuscript due: 31 December 2014**

**Symposium: 10-12 June 2015**

Gunn Ralle, Conference Secretariat ISFOG 2015, NGI PO Box 3930, Ullevål Stadion, N-0806 Oslo, NORWAY	e-mail: <a href="mailto:isfog2015@ngi.no">isfog2015@ngi.no</a> Website: <a href="http://www.isfog2015.no">www.isfog2015.no</a> Tel: +47 2202 3000 Fax: +47 2223 0448
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ISFOG 2015 will be held at the scenic Holmenkollen Park Hotel Rica with a panoramic view of the city and Oslo Fjord. The hotel is situated near the famous Holmenkollen ski jump arena, about 30 minutes from the Oslo civic centre. Booking details for the hotel and the symposium will be available later, from the ISFOG 2015 web-page. The hotel has been block booked at special rates for delegates and accompanying persons.

## NEWS ON UPCOMING EVENT

## INTERNATIONAL COURSE ON GEOTECHNICAL AND STRUCTURAL MONITORING

Date: 4-5-6 June 2014

Venue: "Castle of Poppi", Tuscany (Italy)

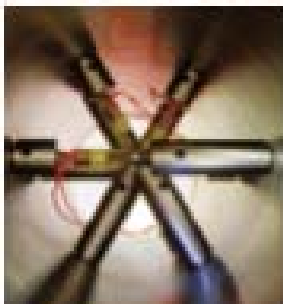
Course Director: John Dunnycliff, Consulting Engineer

Organizer: Paolo Mazzanti, NHAZCA S.r.l.



The purpose of the course is to guide participants on how to plan and execute effective geotechnical and structural monitoring programmes. **Seventeen leading experts of the geotechnical and structural monitoring community** from Italy, England, Australia, France, Germany, Norway, Switzerland, USA, Hong Kong and the Netherlands will deliver lectures on the following topics:

- Basic concepts of monitoring and planning,
- Contact Monitoring Methods,
- Remote Monitoring Methods,
- Management, Analysis and Interpretation of Data.

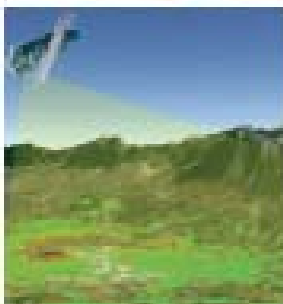


The course is intended for project managers and other decision-makers who are concerned with **management of RISK** during construction, geotechnical and structural engineers, end users, consultants, service providers, manufacturers and researchers working in the following sectors:

- Large infrastructures, Transportation, Mining, Oil and gas, Land and water management, Sensor and equipment manufacturers.

For additional information please contact:

[secretariat@geotechnicalmonitoring.com](mailto:secretariat@geotechnicalmonitoring.com)



#### THE VENUE

The 3 day course will be held in Poppi (Tuscany, Italy) in the main room of a 10th Century Castle. Poppi is in the countryside of Tuscany near the city of Florence. Dedicated transportation to Poppi from Florence main train station and city airport will be available.

#### REGISTRATION

**Early registration** (before 1 March 2014): 1 000,00\* €

**Regular registration** (on or after 1 March 2014): 1 250,00\* €

Registration deadline: **20 May 2014.**

Discounts opportunities are available on the course website.

\*Value Added Tax (VAT) not included. Currently 22%.

Submit your registration at: [www.geotechnicalmonitoring.com/registration](http://www.geotechnicalmonitoring.com/registration)

For partnership opportunities visit: [www.geotechnicalmonitoring.com/partners](http://www.geotechnicalmonitoring.com/partners)

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## NEW BOOK ON GEOTECHNICAL ENGINEERING

Jean-Louis BRIAUD

Dear Colleague,

As you may know, I have very recently published a book entitled “Geotechnical Engineering: Unsaturated and Saturated Soils” and I would like to give you a special code (BRI13) which you can use to get 30% off the list price of \$165 in case you wish to purchase a copy. The offer expires on 31Dec2013. For more information about the book or to purchase print or e-books go to:

[www.wiley.com/buy/9780470948569](http://www.wiley.com/buy/9780470948569)

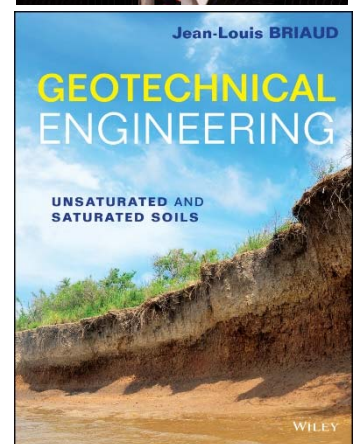
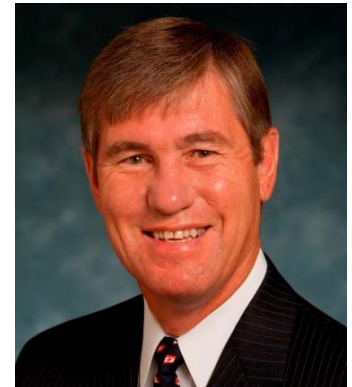
If you are a professor or instructor and are interested in contacting your local Wiley sales representative to discuss adopting the book and get an evaluation copy, go to: <http://www.wiley.com/WileyCDA/WileyTitle/productCd-0470948566.html>.

I also have some dedication cards that I can sign and send to you if you wish to stick the card on to your copy. The book is 1000 pages long with 1300 illustrations and 400 problems with solutions next to the problems at the end of each chapter. I attach the 27 chapter table of contents which will give you a sense of what you can find in the book. It includes the classical topics like lab tests, foundations, retaining walls and slope stability but also geosynthetics, geoenvironmental, soil improvement, earthquake engineering, site investigations, in situ testing, engineering geology, geophysics, erosion, problem solving methods (FDM, FEM, DEM, probability and risk), and even technical communications.

I wrote this book over the last three years not only for undergraduate courses but also for most courses offered in geotechnical engineering so that the students would not have to buy several books to cover the topic. I also wrote it for the practitioner as a very helpful reference. In addition to covering the breadth of geotechnical engineering, I wanted to attempt to start with unsaturated soil mechanics and treat saturated soils as a special case rather than the other way around.

If you find something you like about the book, please tell others and if you find mistakes, please tell me so that I can address them in subsequent printing of this edition and continue to improve.

Best wishes, Jean-Louis Briaud



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## EVENT DIARY

### ISSMGE EVENTS

Please refer to the specific conference website for full details and latest information.

#### 2014

##### **8th International Conference on Physical Modelling in Geotechnics 2014 (ICPMG)**

Date: Tuesday 14 January 2014 - Friday 17 January 2014

Location: University Club, The University of Western Australia, Perth, Western Australia, Australia

Language: English

Organizer: Centre for Offshore Foundation Systems, The University of Western Australia

Contact person: arinex pty limited

Address: GPO Box 316, Belmont WA 6984 Australia,

Phone: +61 2 9265 0890

Fax: + 61 2 9265 0880

E-mail: [icpmg2014@arinex.com.au](mailto:icpmg2014@arinex.com.au)

Website: <http://icpmg2014.com.au/>

##### **GeoShanghai 2014**

Date: Monday 26 May 2014 - Wednesday 28 May 2014

Location: Shanghai, China

Language: English

Organizer: Tongji University

Contact person: Xiong Zhang

Address: Department of Civil & Environmental Engineering, University of Alaska Fairbanks, 99775, Fairbanks, AK, United States

Phone: +1(907)474-6172

Fax: +1(907)474-6030

E-mail: [xzhang11@alaska.edu](mailto:xzhang11@alaska.edu)

Website: [www.geoshanghai2014.org](http://www.geoshanghai2014.org)

##### **TC207 Conference on "Soil-Structure Interaction: Retaining Structures"**

Date: Monday 16 June 2014 - Wednesday 18 June 2014

Location: St. Petersburg State Transport University, Saint Petersburg, Russia

Language: English

Organizer: TC207 Soil-Structure

Contact person: Michael Lisyuk

Address: Izmaylovsky prosp. 4, of. 414, 190005, Saint Petersburg, Russia

Phone: +7-812-339-35-87

Fax: +7-812-575-36-25

E-mail: [lisyuk@gmail.com](mailto:lisyuk@gmail.com)

Website: <http://www.TC207SSI.org>

##### **Geohubei International Conference 2014**

Date: Sunday 20 July 2014 - Tuesday 22 July 2014

Location: Three Georges Dam, Hubei, China

Language: English

Organizer: Geohubei International Conference 2014

Contact person: Dr. Guodong Zhang

Address: Three Gorges University,

E-mail: [geohubei.adm@gmail.com](mailto:geohubei.adm@gmail.com)

Website: <http://geohubei2014.geoconf.org>

**EVENT DIARY****ISSMGE EVENTS (CONTINUED)****2nd International Conference on Information Technology in Geo-Engineering**

Date: Monday 21 July 2014 - Tuesday 22 July 2014

Location: Durham University, Durham, United Kingdom

Language: English

Organizer: Professor David Toll

Contact person: Dr Ashraf Osman

Address: School of Engineering and Computing Sciences, Durham University, DH1 3LE, Durham, United Kingdom

Phone: +44 191 334 2425

Fax: +44 191 334 2408

E-mail: [icitg@duram.ac.uk](mailto:icitg@duram.ac.uk)

Website: [www.icitg.dur.ac.uk](http://www.icitg.dur.ac.uk)

**TC204 ISSMGE International Symposium on "Geotechnical Aspects of Underground Construction in Soft Ground" - IS-Seoul 2014**

Date: Monday 25 August 2014 - Wednesday 27 August 2014

Location: Sheraton Grande Walkerhill, Seoul, Korea

Language: English

Organizer: TC204 of ISSMGE and Korean Geotechnical Society

Contact person: Prof. Chungsik Yoo

Address: 300 Chun-Chun Dong, Jang-An Gu, 440-746, Suwon, Kyoung-Gi Do, Korea

Phone: +82-32-290-7518

Fax: +82-32-290-7549

E-mail: [csyoo@skku.edu](mailto:csyoo@skku.edu)

**International Symposium on Geomechanics from Micro to Macro (TC105)**

Date: Monday 01 September 2014 - Wednesday 03 September 2014

Location: Cambridge University, Cambridge, United Kingdom

Language: English

Organizer: TC105

Contact person: Professor Kenichi Soga

Address: University of Cambridge, Department of Engineering, Trumpington Street, CB2 1PZ, Cambridge, U K

Phone: +44-1223-332713

Fax: +44-1223-339713

E-mail: [ks207@cam.ac.uk](mailto:ks207@cam.ac.uk)

**XV Danube-European Conference on Geotechnical Engineering**

Date: Tuesday 09 September 2014 - Thursday 11 September 2014

Location: Vienna University of Technology, Vienna, Austria

Language: English and German

Organizer: OIAV, ASSMGE & Vienna University of Technology, Institute of Geotechnics

Contact person: Professor Heinz Brandl, Armin Steurer, Gerda Pflieger

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Fax: +43 1 58801 22199

E-mail: [igb@tuwien.ac.at](mailto:igb@tuwien.ac.at)

Website: <http://www.decge2014.at>

**EVENT DIARY****ISSMGE EVENTS (CONTINUED)****10th International Conference on Geosynthetics (10ICG)**

Date: Sunday 21 September 2014 - Thursday 25 September 2014

Location: Estrel Convention Center, Berlin, Germany

Language: English

Organizer: DGGT / German IGS Chapter

Contact person: Gerhard Braeu

Address: Baumbachstrasse 7, 81245, Muenchen, Germany

Phone: +49 89 289 27139

Fax: +49 89 289 27189

E-mail: [g.braeu@bv.tum.de](mailto:g.braeu@bv.tum.de)

**7th International Congress on Environmental Geotechnics**

Date: Monday 10 November 2014 - Friday 14 November 2014

Location: Melbourne Convention and Exhibition Centre, Melbourne, Victoria, Australia

Language: English

Organizer: Engineers Australia

Contact person: Hayley Le Gros

Address: WSM, 119 Buckhurst Street, Vic 3205, Melbourne, Victoria, Australia

Phone: 61 3 9645 6322

E-mail: [7iceg2014@wsm.com.au](mailto:7iceg2014@wsm.com.au)

Website: [www.7iceg2014.com](http://www.7iceg2014.com)

**Geohazards 2014 International Symposium on Geohazards: Science, Engineering and Management**

Date: Thursday 20 November 2014 - Friday 21 November 2014

Location: Kathmandu, Nepal

Language: English

Organizer: Nepal Geotechnical Society

Secretary:

Contact person: Dr. Netra Prakash Bhandary

Address: Dept. Civil Environmental Eng, Ehime University, 790-8577, Matsuyama, Ehime, Japan

Phone: +81-89-927-8566

Fax: +81-89-927-8566

E-mail: [netra@ehime-u.ac.jp](mailto:netra@ehime-u.ac.jp)

Website: <http://www.ngeotechs.org/ngs/index.php/geohazards-2014>

**7th International Conference on Scour and Erosion (ICSE-7)**

Date: Tuesday 02 December 2014 - Thursday 04 December 2014

Location: Rendezvous Grand Hotel Perth, Scarborough, Perth, Western Australia

Language: English

Organizer: ISSMGE TC213 / University of Western Australia

Contact person: Liang Cheng

Address: M051, 35 Stirling Highway, 6009 Perth, Western Australia

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Fax: +61 8 6488 1018

E-mail: [liang.cheng@uwa.edu.au](mailto:liang.cheng@uwa.edu.au)

Website: <http://www.2014icse.com/index.html>

## EVENT DIARY

### ISSMGE EVENTS (CONTINUED)

#### **12th Australia and New Zealand Conference on Geomechanics – The Changing Face of the Earth: Geo-Processes & Human Accelerations**

Date: Sunday 22 February 2015 – Wednesday 25 February 2015:  
Location: Wellington, New Zealand  
Contact person: Amanda Blakey  
E-mail: [secretary@nzgs.org](mailto:secretary@nzgs.org)

#### **XVI African Regional Conference on Soil Mechanics and Geotechnical Engineering - Innovative Geotechnics for Africa**

Date: Monday 27 April 2015 - Thursday 30 April 2015  
Location: Hammamet, Tunisia  
Language: English and French  
Organizer: ATMS  
Contact person: Mehrez Khemakhem  
Phone: +216 25 956 012  
E-mail: [mehrez.khemakhem@gmail.com](mailto:mehrez.khemakhem@gmail.com)  
Website: [www.16cramsg.org](http://www.16cramsg.org)

#### **ISFOG 2015**

Date: Wednesday 10 June 2015 - Friday 12 June 2015  
Location: Holmenkollen Park Hotel Rica, Oslo, Norway  
Language: English  
Organizer: NGI  
Contact person: Vaughan Meyer - NGI  
Address: PO Box 3930, Ullevaal Stadion, N-0806, Oslo, Norway  
Phone: +47 22 02 30 00  
Fax: +47 22 23 04 48  
E-mail: [isfog2015@ngi.no](mailto:isfog2015@ngi.no)  
Website: [www.isfog2015.no](http://www.isfog2015.no)

#### **XVI European Conference on Soil Mechanics and Geotechnical Engineering**

Date: Sunday 13 September 2015 - Thursday 17 September 2015  
Location: Edinburgh International Conference Centre, Edinburgh, Scotland, United Kingdom  
Language: English  
Organizer: British Geotechnical Association  
Contact person: Derek Smith  
Address: Coffey Geotechnics Limited, The Malthouse, 1 Northfield Road, Reading, Berkshire, RG1 8AH, Reading, UK  
Phone: +44 1189566066  
Fax: +44 1189576066  
E-mail: [derek\\_smith@coffey.com](mailto:derek_smith@coffey.com)  
Website: <http://www.xvi-ecsmge-2015.org.uk/>



## EVENT DIARY

### ISSMGE EVENTS (CONTINUED)

**Workshop on Volcanic Rocks & Soils**

Date: Thursday 24 September 2015 - Friday 25 September 2015

Location: Isle of Ischia, Italy

Language: English

Organizer: Associazione Geotecnica Italiana (AGI)

Contact person: Ms. Susanna Antonielli

Address: Viale dell'Università 11, 00185, Roma, Italy

Phone: +39 06 4465569 - +39 06 44704349

Fax: +39 06 44361035

E-mail: [agi@associazionegeotecnica.it](mailto:agi@associazionegeotecnica.it)

Website: [www.associazionegeotecnica.it](http://www.associazionegeotecnica.it)

**The 15th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering - New Innovations and Sustainability-**

Date: Monday 09 November 2015 - Friday 13 November 2015

Location: Fukuoka International Congress Center, Fukuoka, Kyushu, Japan

Language: English

Organizer: The Japanese Geotechnical Society

Contact person: Toshifumi Mukunoki

Address: 2-39-1 Kurokami, Chuou-ku, Kumamoto, JAPAN, 860-8555, Kumamoto, Japan

Phone: +81-96-342-3535

Fax: +81-96-342-3535

E-mail: [15tharc@kumamoto-u.ac.jp](mailto:15tharc@kumamoto-u.ac.jp)

Website: <http://www.jgskyushu.net/uploads/15ARC/>

**XV Pan American Conference on Soil Mechanics and Geotechnical Engineering**

Date: Sunday 15 November 2015 - Wednesday 18 November 2015

Location: Hilton Hotel, Buenos Aires, Buenos Aires, Argentina

Language: Spanish - Portuguese - English (simultaneous translation)

Organizer: Argentinean Society for Soil Mechanics and Geotechnical Engineering

Contact person: Dr. Alejo Oscar Sfriso

Address: Rivadavia 926 Suite 901, C1002AAU, Buenos Aires, Buenos Aires, Argentina

Phone: +541143425447

Fax: +541143423160

E-mail: [presidente@saig.org.ar](mailto:presidente@saig.org.ar)

Website: [www.panam2015.com.ar](http://www.panam2015.com.ar)

**EVENT DIARY****ISSMGE EVENTS (CONTINUED)****2016****NGM 2016, The Nordic Geotechnical Meeting**

Date: Wednesday 25 May 2016 - Saturday 28 May 2016

Location: Harpan Conference Centre, Reykjavik, Iceland

Language: English

Organizer: The Icelandic Geotechnical Society

Contact person: Haraldur Sigursteinsson

Address: Vegagerdin, Borgartún 7, IS-109, Reykjavik, Iceland

Phone: +354 522 1236

Fax: +354 522 1259

E-mail: [has@vegagerdin.is](mailto:has@vegagerdin.is)Website: <http://www.ngm2016.com>**3rd ICTG International Conference on Transportation Geotechnics**

Date: Sunday 04 September 2016 - Wednesday 07 September 2016

Location: Vila Flor Cultural Centre and University of Minho, Guimaraes, Portugal

Language: English

Organizer: Host: Portuguese Geotechnical Society and University of Minho

Secretary:

Contact person: Prof. A. Gomes Correia (Chair)

Address: University of Minho, School of Engineering, 4800-058, Guimarães, Portugal

Phone: +351253510200

Fax: +351253510217

E-mail: [agc@civil.uminho.pt](mailto:agc@civil.uminho.pt)Website: <http://www.webforum.com/tc3>

**EVENT DIARY****NON-ISSMGE SPONSORED EVENTS****2014****Workshop on Levee and Coastal Rehabilitation Practices**

Date: Wednesday 12 February 2014 - Thursday 13 February 2014

Location: Hyatt Regency, Miami, FL, United States

Language: English

Organizer: Deep Foundations Institute

Contact person: Mary Ellen Bruce

Address: P.O. Box 178,15367, Venetia, PA, USA

Phone: (724) 942-4220

Fax: (724) 260-0582

E-mail: [mebruce@dfi.org](mailto:mebruce@dfi.org)**DFI-EFFC International Conference on Piling and Deep Foundations**

Date: Wednesday 21 May 2014 - Friday 23 May 2014

Location: Stockholmsmässan, Stockholm, Sweden

Language: English

Organizer: DFI &amp; EFFC

Contact person: Deep Foundations Institute

Address: 326 Lafayette Ave,07506, Hawthorne, New Jersey, United States

Phone: 9734234030

Fax: 9734234031

E-mail: [staff@dfi.org](mailto:staff@dfi.org)Website: <http://www.regonline.com/builder/site/Default.aspx?EventID=1221506>**8th European Conference on Numerical Methods in Geotechnical Engineering (NUMGE14)**

Date: Tuesday 17 June 2014 - Friday 20 June 2014

Location: Delft University of Technology, Delft, The Netherlands

Language: English

Organizer: Prof. Michael Hicks

Contact person: Mrs. Hannie Zwiers

Address: Delft University of Technology, Faculty of Civil Engineering &amp; Geosciences, Stevinweg 1, 2628, CN Delft, The Netherlands

Phone: +31 15 2788100

E-mail: [info@numge2014.org](mailto:info@numge2014.org)Website: <http://www.numge2014.org>**International Conference in Geotechnical Engineering - ICGE-Colombo 2015**

Date: Monday 10 August 2015 - Tuesday 11 August 2015

Location: Colombo, Colombo, Sri Lanka

Language: English

Organizer: Sri Lankan Geotechnical Society

Contact person: Eng. K. L. S. Sahabandu

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FOR FURTHER DETAILS, PLEASE REFER TO THE WEBSITE OF THE SPECIFIC CONFERENCE

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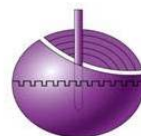
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## ISSMGE's International Journal of Geoengineering Case Histories

The International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) is pleased to announce the publication of another new issue of the International Journal of Geoengineering Case Histories (<http://casehistories.geoengineer.org>).

The papers included in Issue #3, Volume #2 are the following:

**Paper Title:** Flat Jack Method for Measuring Design Parameters for Hydraulic Structures of the Koyna Hydro Electric Project in India, pp. 182-195

**Authors:** Keshav Ral Dhawan



**Abstract:** The paper presents two different projects: The first involves a case with limited rock cover on a side of an excavated surge shaft located near a steep slope. The second involves the assessment of design parameters of an existing masonry dam for use as input in dynamic analysis. The induced stresses in the surge shaft of Koyna Hydro Electric Project (K.H.E.P.) stage-IV were measured with flat jack. These tests were first performed in a 4 m diameter pilot shaft and after the shaft was excavated to its full diameter of 22.70 m. The stresses increased from 3.96 MPa to 5.09 MPa, when the 4m-diameter surge shaft was expanded to its full diameter of 22.70 m, in the case where significant rock mass cover existed at EL 651.00 m. However stress

reduction or no variation in the induced stress was measured in the portion of insufficient rock cover. In the second case, to determine the design parameters of Kolkewadi masonry dam of K.H.E.P stage-III, flat jack tests were conducted at the upstream side of Kolkewadi masonry dam in masonry of 1:4 and 1:3 and at downstream sloping side in masonry of 1:5. It is impractical and difficult to obtain mechanical properties of masonry in laboratory from the extracted core samples, due to intrinsic nonhomogeneity of the material. The brick/stone and mortar layers caused anisotropic behavior of masonry. Average deformation modulus for 1:3 masonry was 32.8 GPa. Similarly, the average deformation modulus for the 1:4 and 1:5 masonry was 19.0 and 13.7 GPa respectively and were adopted for the dynamic analysis. Induced stresses in the masonry dam were found to be nearly equal to the overburden.

**Download here:** <http://casehistories.geoengineer.org/volume/volume2/Issue 6/IJGCH 2 3 1.html>

**Paper Title:** Large Diameter Long Bored Piles in the Mekong Delta, pp. 196-207

**Authors:** Bengt H. Fellenius, Nguyen Minh Hai



**Abstract:** Static loading tests, O-cell tests, were performed on two long, strain-gage instrumented, bored piles in HoChiMinh City, Vietnam, where a series of twelve apartment towers were to be constructed. The test piles were constructed to 76 and 91 m depth and tested to maximum O-cell loads of 10 and 18 MN, respectively. For both piles, the O-cell level was placed at a depth of about 20 % of the pile length above the pile toe. The soil profile consisted of very soft organic clay to about 10 to 15 m depth underlain by firm to stiff clayey soil to about 25 to 45 m depth. Hereunder, the soil

consisted of a compact to dense sandy silt. Neither of the tests was able to fully engage the shaft resistance of the piles above the O-cell level, but did so below the O-cell level. Back-calculation of the load distributions determined from the strain-gage measurements showed the shaft resistance, even where fully mobilized, to be very small: the beta-coefficient applied in an effective stress analysis was only about 0.13 to 0.14. The evaluations of shaft resistance development showed a maximum shear resistance to occur after a movement of only 3 to 4 mm, after which the response became plastic and strain-softening. The toe resistance was very low because the construction had left soil debris at the bottom of the drilled hole. Ongoing regional settlement leads to concerns about the possibility for the production piles to have a similarly low toe resistance. This would locate the neutral plane of the shorter piles in settling soil and create a downdrag situation for the piled foundation.

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## ISSMGE's International Journal of Geoengineering Case Histories(Continued)

**Paper Title:** The July 10 2000 Payatas Landfill Slope Failure, pp. 208-228

**Authors:** Navid H. Jafari, Timothy D. Stark, Scott Merry



**Abstract:** This paper presents an investigation of the slope failure in the Payatas landfill in Quezon City, Philippines. This failure, which killed at least 330 persons, occurred July 10th 2000 after two weeks of heavy rain from two typhoons. Slope stability analyses indicate that the raised leachate level, existence of landfill gas created by natural aerobic and anaerobic degradation, and a significantly over-steepened slope contributed to the slope failure. The Hydrologic Evaluation of Landfill Performance (HELP) model was used to predict the location of the leachate level in the waste at the time of the slope failure for analysis purposes. This paper presents a description of the geological and environmental conditions, identification of the critical failure surface, and slope stability analyses to better understand the failure and present recommendations for other landfills in tropical areas. In addition, this case history is used to evaluate uncertainty in parameters used in back-analysis of a landfill slope failure.

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**Paper Title:** Embankment Failure in Residual Soils at Nivsar, Ratnagiri, pp. 229-251

**Authors:** Ashish Juneja, Deblina Chatterjee, Rajendra Kumar



**Abstract:** The Nivsar Yard embankment was constructed by the Konkan Railways in 1994. Near to the station building, the 22m high embankment runs parallel to the Kajali River for a stretch of about 100m. This stretch has experienced failure and settlement related problems since the record-breaking July 2005 rainfall. Corrective ground improvement measures were implemented immediately after the monsoon. However, these measures were inadequate because the failure-surface reappeared during the following monsoon. The failure-surface mirrored the shape and size of the failure observed in 2005. Since then after nearly every monsoon, the embankment has moved

despite precautionary measures taken by the railway to arrest the movement. The hydrogeological and geotechnical properties which affect slope stability are first discussed. The stability of the embankment is then evaluated at 5-sections drawn along the slope. Two cases are considered. In the first case, the stability of the unreinforced slope is calculated. In the second case, calculations are done using the slope reinforced with soil nails and micropiles installed in 2005 and 2007. The design railway loading and the water level position during the dry and wet season were also taken into account in the stability analysis. The safety factor during the wet season was observed to be less than unity in 4 out of 5 sections for both cases. In each case, the critical circle passed through the toe of the embankment and mirrored the field observations. In 2010-11, the rail tracks were realigned to bypass the failure surface. The stability of the slope was reinvestigated and considered to be safe under the new loads. Irrespective of the above change in the rail alignment, the cumulative settlement of the embankment has also reduced since the 2009 monsoon.

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### About the Journal:

ISSMGE's International Journal of Geoengineering Case Histories (IJGCH) is the only international refereed journal that focuses on case histories and geoengineering practice. The papers published in IJGCH are freely available in color and are accompanied by databases that include the electronic data presented in the paper as well as additional figures. The locations of the case histories are also positioned in a downloadable Google Earth database, and are also available in GeoMap (<http://www.mygeoworld.info/map>).

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## ISSMGE's International Journal of Geoengineering Case Histories (Continued)

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*The Case Histories journal is funded by our sponsors GEI Consultants, Inc. & Zetaş Zemin Teknolojisi A.Ş..*  
To learn more about ISSMGE's Case Histories Journal and submission guidelines, visit:

<http://casehistories.geoengineer.org>.

### From the editor of ISSMGE Bulletin

There is some confusion about case-history articles in this fantastic journal and those in Bulletin. As the editor of Bulletin, I would clarify the differences between them. Bulletin is something like a magazine that emphasizes simplicity, clarity, and speed. Hence, there is no peer review and I do my best to improve the submitted draft quickly so that the readers may get the latest information from the article. The articles are usually short and nice photographs are considered important. In contrast, the International Journal of Geoengineering Case Histories seeks for high quality as an academic journal with good peer reviews. Thus, the two publications of ISSMGE are different but work together as evidenced by many Bulletin articles that are invited to be re-submitted to the journal after their quality is improved and more information is added.

## TECHNICAL ARTICLE

## RAINFALL-INDUCED SLOPE FAILURE CLAIMED 39 CASUALTIES

Ikuro Towhata, VP of ISSMGE for Asia

In the early morning on October 16, 2013, a strong typhoon attacked a volcanic island of Izu Oshima at about 80 km to the south of Tokyo, Japan, and caused a heavy rainfall of 824 mm in one day. Because a volcanic slope is vulnerable to rainfall effects, this extreme climatic event resulted in a huge slope failure and the produced debris flow attacked a local town to claim 39 casualties, as per December 10. Because I was appointed by the Ministry of Education, Culture, Sports, Science and Technology to be the chief coordinator of scientific studies of this disaster, I attempt here to write something about the significance of this disaster. While the reconnaissance study concerns many fields such as volcanology, geology, meteorology and soil mechanics, it is certainly intended by the research team to propose measures for better safety in future.

## WHAT HAPPENED

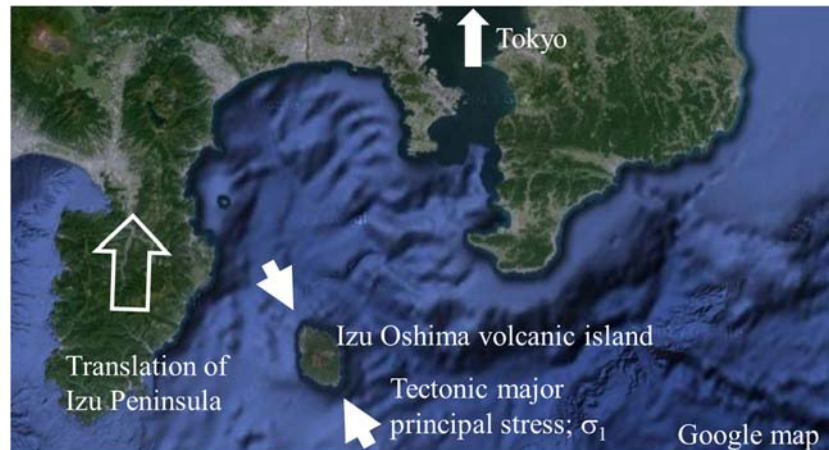


Fig. 1 Location of Izu Oshima Island

Figure 1 indicates the location of the Izu Oshima Island which measures about 15 km in length in the NW-SE direction. At its center is an active volcano of Mt. Mihara which has erupted many times in the human history with the most recent eruption in 1986. Thus, the entire mountain slope is covered by ash, pumice and scoria together with occasional outcropping of lava. Because of the natural beauty, Mt. Mihara is a National Park where soil investigation and installation of equipments are under strict control or prohibited. Fig. 2 shows the location of the debris flow in the island.

Figure 3 shows the overall view of the failed slope. The failure started from the upper part of the slope in which a motor way was constructed for tourism. Figs. 4 to 6 show details of the slope. It may be seen that the thickness of the failed cohesionless material (ash and scoria) is very small while significant erosion occurred in the middle part of the slope and thereby the volume of the debris increased profoundly.



Fig. 2 Location of debris flow in Izu Oshima Island

TECHNICAL ARTICLE

RAINFALL-INDUCED SLOPE FAILURE (CONTINUED)

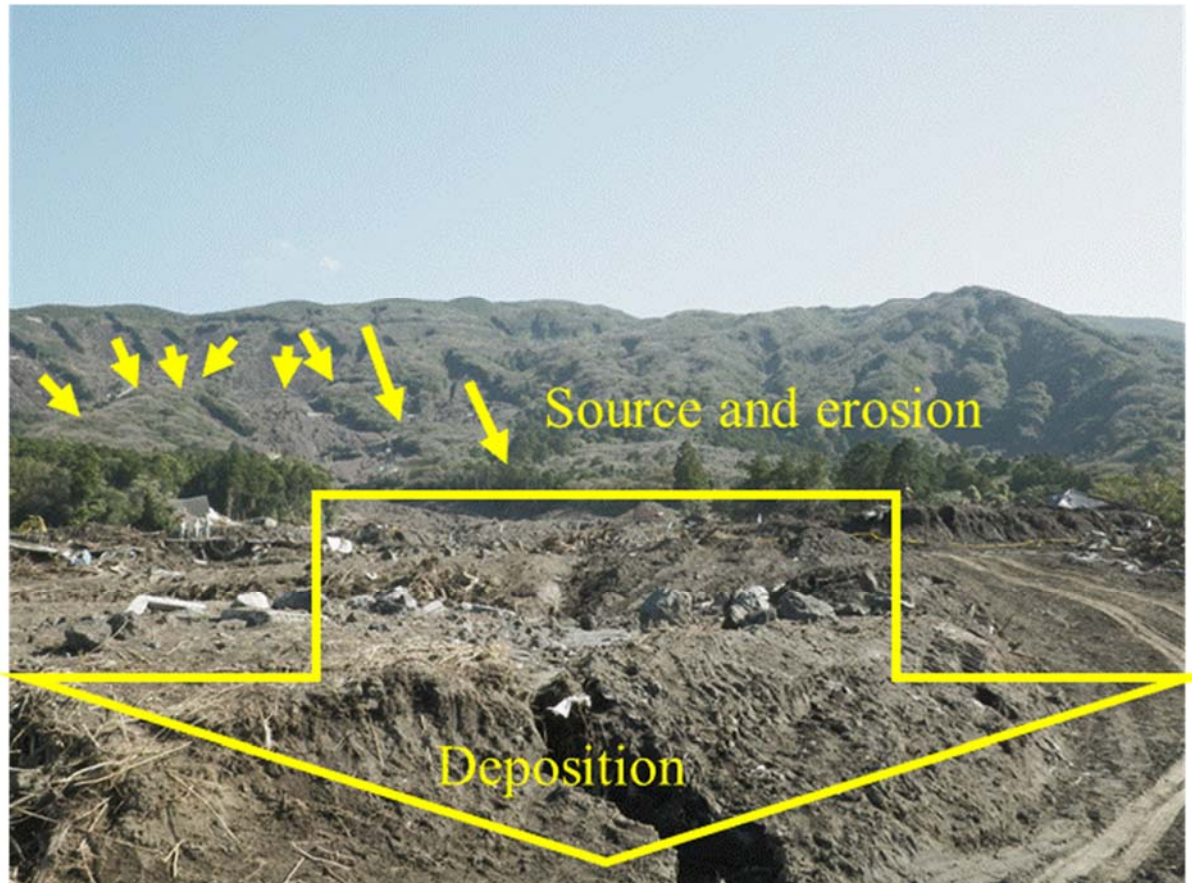


Fig.3 Overall view of the failed slope as seen from the affected town

(a) Thin layer of failure



(b) Water holes (photo by Taro Uchimura)



Fig. 4 Post-failure situation in the source area

TECHNICAL ARTICLE

RAINFALL-INDUCED SLOPE FAILURE (CONTINUED)



Fig. 5 Significant erosion in the middle part of the slope (see road pavement at the center and lava outcrop above the person on the right)



Fig. 6 Destroyed part of Moto-machi Town at the base of the slope

## TECHNICAL ARTICLE

### RAINFALL-INDUCED SLOPE FAILURE (CONTINUED)

#### ON DISASTER MITIGATION MEASURE

There have been both “hard” and “soft” safety measures in the affected area. Noteworthy is that the main part of the mountain belongs to a national park where construction of safety structures is under strict control or even prohibited. Hence, most safety structures have been installed in the lower part of the mountain slope. Fig. 7 shows a catchment reservoir or dam which was constructed in the downstream area of a local river and successfully captured the debris flow. Noteworthy is that such catchment dams were constructed only along major streams where the vulnerability of significant erosion and debris flow was high. In contrast, the failure in this year occurred in a slope where the water stream was relatively small. This implies that the natural hazard is very difficult to predict.



Fig. 7 Catchment dam for debris flow

Early warning based on rainfall forecast has been practiced in which the intensity of rainfall is monitored and predicted and, if the effect of the rain on slope stability is considered high, warning for evacuation is issued. In addition to many administrative difficulties, another difficulty is the accuracy of prediction. In particular, the numerical weather prediction is carried out with a mesh size of 5 km and the warning is issued for this size (or even bigger) of areas. Fig. 2 indicates that the real size of slope failure, being of the order of tens of meters, is much smaller than this prediction size because of the complicated topography, geomorphology and geology. This non-uniformity in hazard is even intensified by the varying rainfall distribution that is also affected by the mountain topography and winds among many other reasons. To cope with this local variation, what should we do?



## TECHNICAL ARTICLE

### RAINFALL-INDUCED SLOPE FAILURE (CONTINUED)

#### MONITORING OF SLOPE MOVEMENT

Legend is that slope failure during rainfall is often preceded by several symptoms / precursors and by monitoring them, an effective early warning may be possible. Those symptoms are, for example, formation of water well, low sound from underground and organic smell in the air. Note that all of them somehow imply deformation and crack opening in a slope. Therefore, although it is very difficult to precisely monitor water flow, sound or smell during heavy rain particularly at night, a more relevant idea of monitoring slope deformation has emerged.

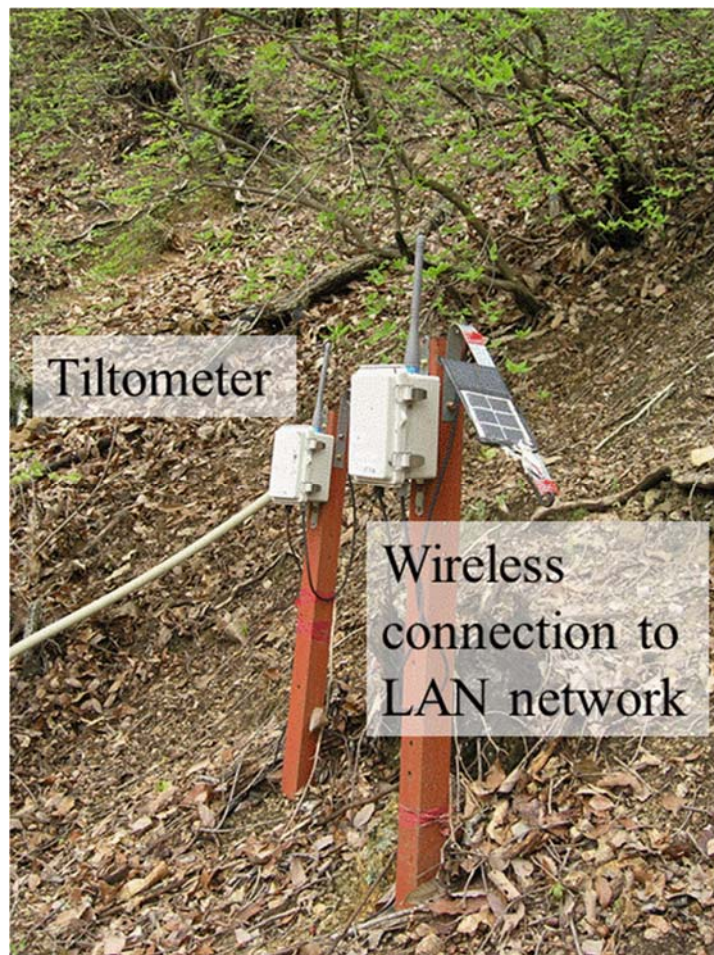


Fig. 8 A low-cost sensor of slope movement.

The device in Fig. 8 is the author's solution. This device precisely monitors its tilting angle that is induced by minor movement of slope sufficiently prior to the ultimate slope failure. By transmitting the tilting information through internet to an engineer's office for interpretation, early warning and evacuation advice can be issued. For details, refer to Uchimura et al. (2008 and 2009) as well as Towhata et al. (2012). The new idea is illustrated in Fig. 9. Note that this idea should be used in combination with the conventional rainfall threshold.

TECHNICAL ARTICLE

RAINFALL-INDUCED SLOPE FAILURE (CONTINUED)

The use of monitored deformation of a slope is called deformation threshold. In contrast, the conventional early warning makes use of the intensity of rainfall, which is called rainfall threshold. It is difficult to state which is better than which. The author’s opinion is that the regional hazard is assessed on the basis of rainfall forecast, as has been practiced, and, in addition, that the local hazard is foreseen by the deformation threshold. This is because the rainfall threshold is a regional idea and, moreover, is not directly related with the local material strength, slope angle, pore water pressure, factor of safety, etc. Deformation in contrast is a consequence of those geotechnical issues and appears to be appropriate for local early warning.

It should be stated that there are still problems to be overcome. One of them is the difficulty of emergency evacuation. The present disaster occurred at around 2AM. One can imagine how difficult and even dangerous it would be for people and particularly senior people to go out of home and walk for safer places in heavy rain at mid night.

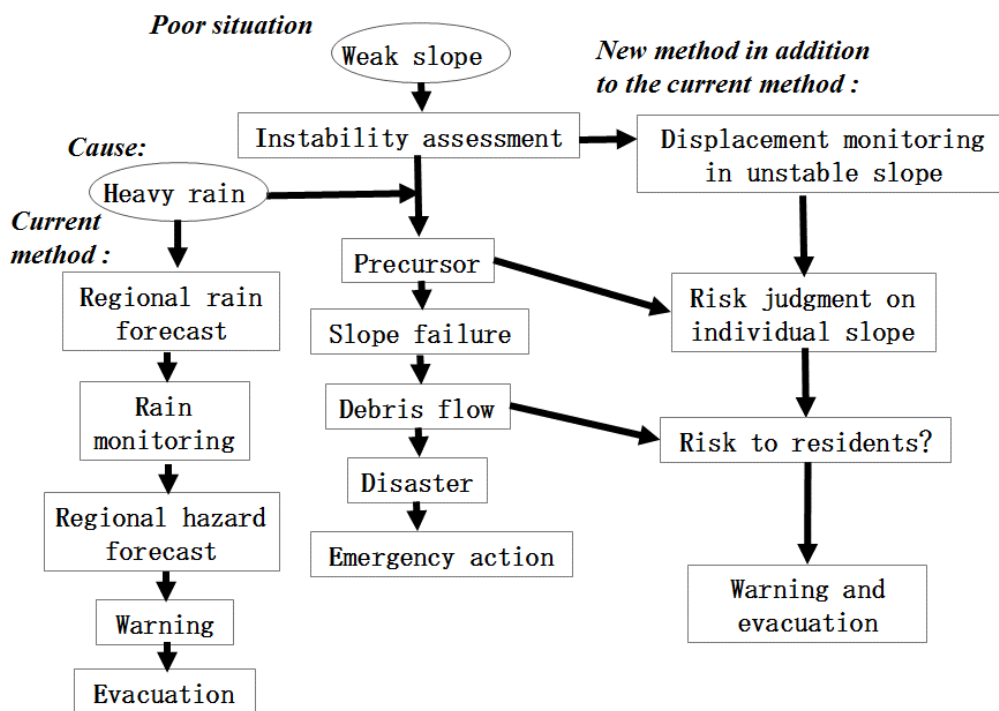


Fig. 9 Schematic illustration of the role played by conventional rainfall and deformation thresholds

References

Towhata, I. (2012) Message to ISSMGE Members, ISSMGE Bulletin, Vol. 5, Issue 1, pp. 1-4.  
 Uchimura, T., Towhata, I., Wang, L. and Seko, I. (2008) Simple and low-cost wireless monitoring units for slope failure, Proc. 1st World Landslide Forum, Tokyo, pp.611-614.  
 Uchimura, T., Towhata, I., Trinh Thi Lan Anh, Fukuda, J, Bautista, C.J.B., Wang, L., Seko, I., Uchida, T., Matsuoka, A., Ito, Y., Onda, Y., Iwagami, S., Kim, M.S. and Sakai, N. (2009) Simple monitoring method for precaution of landslides watching tilting and water contents on slopes surface, Landslide Journal, Vol. 7, No. 3, pp. 351-357.