

ISSMGE Bulletin

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International Society for Soil Mechanics and Geotechnical Engineering

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EDITORIAL BOARD

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Cholachat Rujikiatkamjorn



Message from the President By Professor Pedro Sêco e Pinto

1. INTRODUCTION

It is important to recall that in my programme of candidature for ISSMGE president, submitted in 2005, in item Motivation I have stated:

"To deal with ISSMGE activities using not only my knowledge, but also my heart and passion to keep the fire burning. I will assume the responsibility to act with efficiency, honesty, judgement and equilibrium and to be able the "resonant box" of all the requests, wishes, proposals and expectations of 76 Geotechnical Societies that integrate the ISSMGE. The time demands all arise as we are now on the brink of a new era for ISSMGE. Over the past years a number

of developments have taken place and we need to mould the ISSMGE for this momentum to capitalise on the potential benefits. I know what I do not know, I seek available knowledge, acknowledging my limitations, but I am confident that joining our efforts we will reach our goals and targets and develop our capacity to transform the projects in actions. These actions will increase the hope and will show that new changes are going to be implemented reaching consensus solutions and contributing for the unity and strength of ISSMGE. The Societies with large number of members shall feel that their proposals will contribute for the decisions of ISSMGE, but all the Societies shall feel that their voice can contribute for the role of ISSMGE. The diversity of all 76 ISSMGE Societies is our great richness and a source of inspiration. It is our great challenge, but also a unique opportunity to rethink ISSMGE, in order to reach a new model, to give our hands and to work together. ISSMGE is complex and we need to recognise the importance of dialogue and pursue perfection to reach the optimum solution. I hope that my proposals will find echo in your ideas and with the advice and support of the seventy six Societies and the Board Members, I am confident to overcome the difficulties working together with enthusiasm to reach our common goal to serve better our Society".

Since my election in Osaka Council meeting on 11 September 2005, followed by my Message in ISSMGE News, N°4, November 2005, until Alexandria Council meeting, 4 October 2009, I feel that it is my duty to make a balance of this period of 4 years and to submit to your knowledge, in order to receive your comments and suggestions to improve ISSMGE activities that are our main purpose.

To all ISSMGE members I express a word of praise and gratitude for your contributions, wishing that ISSMGE continue to be a space of scientific interaction, sharing of experiences and launching of innovative ideas to open new avenues.

2. MEMBERSHIP

The present ISSMGE membership is 18530 integrating 86 Member Societies with the following regional distribution: *Africa*: 11 Member Societies, 695 Individual Members; *Asia*: 23 Member Societies, 3431 Individual Members; *Australasia*: 2 member Societies, 1163 Individual Members; *Europe*: 35 Member Societies, 8067 Individual Members; *North America*: 3 Member Societies, 3976 Individual Members; and *South America*: 13 Member Societies, 1196 Individual Members.

It is also important to mention the existent of 21 Corporate Members.

Message from the President (continued) By Professor Pedro Sêco e Pinto

Since 15 September 2005 in Osaka to 9 October 2009 in Alexandria where this Board ends his mission we can notice an increase of 10 Member Societies from 76 to 86, i.e. a 11,3% increase in the Membership and an increase of Individual Members from 16330 to 18530, i.e. a 11.1% increase.

I believe that we, as human beings, have an enormous amount of choice to create the beautiful lives of our dreams. Fate and our choices work in concert to sculpt the look of our lives.

In my interaction with the Member Societies and Individual Members I have listened twice as I have spoken, as I strongly believe that listening intently to someone is one of the best ways I know of to honour that person and forge a deep human connection.

I wish to the Member Societies, to the Corporate Members and to the Individual Members immense blessings along this voyage called a life.

3. TECHNICAL COMMITTEES

ISSMGE wants to play an important role helping the geotechnical community to explore the best ways for research, design, construction and assessment of geotechnical structures safety in order to reach the expectations and targets of our Society during the third Millennium.

Since September 2005 I worked in all TCs, based in the Technical Committees Administrative Reports (2001-2005), proposals from Member Societies and suggestions from key persons. I have also interacted with the potential Chairpersons, Host Members Societies, Regional Vice Presidents and Secretary General, with whom I worked closely in these matters.

In my letter addressed to the presidents of Member Societies on 7 February 2006 I attached a summary of this work, and informed about the current state of TCs, the appointed chairpersons, the host Member Societies, the Core Members, Terms of Reference and Planning of Activities. For a better clarification of my proposal I informed that:

i) Some TCs were re-activated with up-dated ToRs;

ii) The chairpersons were requested to put considerable efforts in the Planning of Activities, dissemination of the work and the out coming technical reports;

iii) Some TCs were discontinued due the creation of new JTCs;

iv) Some new TCs were created, in order to innovate;

v) A better involvement of Member Societies and geographical distribution has deserved considerable attention;

vi) Participation of young engineers was requested;

vii) Cooperation between ISSMGE and Industry was encouraged.

I have requested to the Member Societies confirmation related the appointment of Chairpersons, Host Member Societies and Core members

Through our 24 Technical Committees and our Conferences we have the responsibility to interact with the Society.

Very recognisable topics, such as: transportation, environmental, geo hazards, preservation of historic sites, education, professional practice and safety evaluation are a good opportunity.

The TCs are the spine of ISSMGE, a forum of discussion contributing for the advancement of knowledge in geotechnical engineering. The TCs should disseminate their work, during ISSMGE Conferences, e.g. a Workshop, or Satellite conference. At the end of each tenure each Technical Committee should produce an ISSMGE report.

Within this framework a great contribution came from the role of 24 ICSMGE Technical Committees, e.g.

- For Transport Systems (TC3 "Geotechnics of Pavements", TC17 "Ground Improvement", TC18 "Deep Foundations", TC28 "Underground Construction in Soft Ground Conditions", TC33 "Geotechnics of Soil Erosion", TC36 "Foundation Engineering in Difficult Soft Soil Conditions", TC37 "Interactive Geotechnical Design", TC 38 "Soil-Structure Interaction", TC 40 "Forensic Geotechnical Engineering"); - To support Environmental Policy (TC1 "Coastal Engineering and Dike Technology", TC5 "Environmental Geotechnics", TC 41 Mega Cities);

- For natural disasters (TC4 "Earthquake Geotechnical Engineering and Associated Problems", TC19 "Preservation of Historic Sites", TC 39 "Geotechnical Engineering for Coastal Disaster Mitigation and Rehabilitation");

Education in Geo-Engineering (TC 23 "Limit State Design in Geotechnical Engineering", TC32 "Engineering Practice of Risk Assessment and Management",

- For basic sciences, e.g.TC2 "Geotechnics of Physical Modeling", TC6 "Unsaturated Soils", TC8 "Frost Geotechnics", TC16 "Ground Properties from in-situ Testing", TC 29 "Laboratory Stress Strain Strength Testing of Geomaterials", TC34 "Prediction Methods in Large Strain Geomechanics", TC35 "Geotechnics of Particulate Media".

In a world that moves in the direction of the global village it is very important the universality of the knowledge and the need for a permanent renewing. It is important to communicate, to share experiences, to compare methodologies and to monitor the results. The benefits of an open dialogue between academicians, researchers, practitioners, contractors and owners are huge.

We should not forget that it is not the lack of knowledge that provoke problems, but our obstinacy in having certainties and that:

"The important thing in science is not So much to obtain new facts, as to discover

New ways of thinking about them."

Message from the President (continued) By Professor Pedro Sêco e Pinto

I have appreciated very much the continuous and regular contacts trough my Messages in ISSMGE News and ISSMGE Bulletin and my letters, my attendance to several meetings and Conferences organized by the Technical Committees.

We should not forget that failure is an essential ingredient for high achievement. We can not win without leaving our safety zone and taking calculated risks. The most risks we take to pursuit our dreams, the more we are going to fail. But we should not forget there is nothing so useless as doing efficiency that which should not be done.

Following the memorable words of Anatole France: "To accomplish great things we must not only act, But also dream, not only plan, but also believe, And the belief in a thing makes it happen".

4. REGIONAL CONFERENCES

The Regional Conferences take place with a periodicity of 4 years. I had the opportunity to participate during 2006 and 2007 in CAC meetings of Isla de Margarita, Madrid and Yaoundé Regional Conferences.

I have also attended and delivered Messages at Opening Ceremonies and Closing Ceremonies, chaired sessions in the following Regional Conferences:

XIII PCSMGE - Venezuela
XIV ECSMGE - Spain
X ANZCG - Australia
XIV ARCSMGE - Cameroon
XIII ARSMSGE - India

I have participated in CAC meetings of XIV PCSMGE 2011 (October, 2-6) - Toronto and XV ARCSMGE 2011 (June, 13-16) - Maputo - Mozambique.

In addition I have interacted with the Organizing Committees of XIV ARCSMGE May, 23-27, 2011 Hong Kong, XV ARCSMGE, Maputo, June, 13-16 2011, XV ECSMGE Athens September, 13-18, 2011 and XV ARCSMGE Toronto, October 2011, during the stage of preparation of Bulletin 1.

We need to turn Regional Conferences more attractive to have the courage to address hot topics and case histories with failures. We should not forget that courage is not the absence of fear but the willingness to walk through our fear in pursuit of a goal that is important to us. Remember, on the other side of our fears you will discover our fortune.

But do not forget that this world was built by people who felt some discontent with the way things were and knew they could be better. Greatness always arrives for those who are never satisfied even it looks nice.

5. INTERNATIONAL CONFERENCES

There has been considerable effort in making sure that good progress is made with the arrangements for the 17 ICSMGE, Alexandria, 5-9 October 2009. In addition to an extensive exchange of correspondence, Conference Advisory Committee meetings took place in Cairo and Alexandria on 19 th November 2006 and subsequently in Madrid, Brisbane, Kolkata during 2007, in St. Petersburg on 17th June 2008 and in Cairo on 28 February 2009.

Bulletin 2 was printed on June 2007 and distributed at all the ISSMGE Regional Conferences (13th Pan-American Conference in Isla Margarita 16-20 July 2007; 14th European Conference in Madrid 24-27 September 2007; 10th Australasia Conference in Brisbane 21-24 October 2007; 14th African Conference in Yaoundé 26-28 November 2007; 13th Asian Conference in Kolkata 10-14 December 2007. The Bulletin 2 is available on the conference website: http://www.2009icsmge-egypt.org/

After consulting CAC and COC members ISSMGE President have appointed SOA Lecturers and Co-Authors, Invited Lecturers and Terzaghi Oration Lecturer and General Reporters.

The President sent a letter to the Technical Committees chairpersons inviting them to organise a Satellite Conference or a Seminar for the occasion of XVII ICSMGE. The following TCs have responded positively: TC2, TC 4, TC 5, TC 6, T C8, TC 17, TC 23, TC 28, TC 29 and TC 38.

I had the opportunity to attend the 5th International Congress on Environmental Geotechnics ICEGE in Cardiff on June 26-30, 2006 and delivered messages for the Opening Ceremony and Closing Ceremony.

The 6 th ICEGE will take place in New Delhi - India, on 8-12 November 2010.

Message from the President (continued) By Professor Pedro Sêco e Pinto

The president chaired the CAC meeting that took place on 18 th December 2008, in Bangalore. I have interacted with the Organizing Committee during the stage of preparation of Bulletin 1.

In dealing with International Conferences we should not forget the memorable lines of T.W. Huxlex:

"The known is finite The unknown is infinite Intelectually we are in the middle of an islet Surrounded by an imense ocean of inexplicability. Our business in each generation is to Reclaim a little more land To add something to the extent and solitude of our possessions".

6. YOUNG GEOTECHNICAL ENGINEERS - The ISSMGE FUTURE

ISSMGE should prepare the young geotechnical engineers to face the real needs of society and the new challenges. So it is important to help them to develop independent thinking and decision making skills trough practice, to reduce the gap between theory and practice, to help them explore their intuition and teach them the importance of engineering judgement.

From a balance of the Young Geotechnical Engineers Regional Conferences organised in Africa (2), in Asia (6), Australasia (8), in Europe (19) and in South America (3) it was recognised the great interest for the education of young geotechnical engineers.

The list of the recent Regional Young Geotechnical Conferences is the following:

2007 Tunis -	Tunisie	2 th AYGEC
2008 Bangalore -	India	6 th AYGEC
2008 Wellington -	Australasia	8 th AYGEC
2008 Gyor -	Hungary	19 th EYGEC
2009 Cordoba-	Argentina	3 rd SAYGEC
	-	

I was invited to deliver lectures and also messages for the occasion of Opening Ceremonies and Closing Ceremonies of 2th AYGEC (Tunis, 2006), 6th AYGEC (Bangalore, 2008), 17th EYGEC (Zagreb, 2006), 18th EYGEC (Ancona, 2007), 19th EYGEC (Gyor, 2008) and 3rd SAYGEC (Cordoba, 2009),

The President has interacted with the Chairperson of 4 IYGEC Dr. Fatma Baligh mainly to discuss the letter of invitation, the conference programme and the instructions for the authors.

By e.mail 26 November 2008 the invitations were sent by the Organising Committee to all ISSMGE Member Societies. A CAC meeting of 4IYGEC took place in Alexandria on 26 February 2009. Intensive interaction has continued between myself and the Chairperson of 4 IYGEC to discuss several technical and administrative issues.

I would like to transmit the young geotechnical engineers the following message from Kahlii Gibran, The Prophet

"The hidden well-spring of your soul must needs rise and run murmuring to the sea; And the treasure of your infinite depths would be revealed to your eyes. But let there be no scales to weigh your unknown treasure; And seek not the depths of your knowledge with staff or sounding line".

7. OTHER REGIONAL CONFERENCES

The ISSMGE President has submitted for discussion his proposal in Riga meeting on 13 October 2005 for the occasion of 10 th Baltic Conference to extend the organization of Baltic Conferences to other Societies of Baltic Region, in order to turn these Conferences more attractive and to increase the participation. This proposal was extensively discussed and was approved by unanimously.

13 th Danube European Conference on Geotechnical Engineering organized by Slovenian Geotechnical Society was held on 29 to 31 May 2006 in Ljubljana, with 300 participants from 29 countries. The proceedings have integrated 187 papers from 34 countries.

16 th SEAGS Conference took place in Kuala Lumpur 8-11 May 2007. This Conference was attended by 500 participants from 23 countries. The Conference Proceedings integrate Opening Keynote Address, Chin Fung Kee Lecture, 8 Keynote Lectures, 9 Special Lectures and 130 papers.

The 11 th Baltic Sea Geotechnical Conference took place in Gdansk on 15-18 September with 280 participants from 30 countries. The Conference Proceedings integrate 124 peer-review papers in 2 Volumes and a CD-Rom.

Message from the President (continued) By Professor Pedro Sêco e Pinto

In the great majority of these Conferences I was invited to chair Sessions and to deliver Lectures.

Troubles can transform, if we chose to allow them to do so. As Joseph Cambell wrote: "Where you stumble, there your treasures lies".

I appreciate very much the message of Bernard Shaw "Some men see things as they are and say "why"? I dream things that never were, and say "why not".

8. FEDIGS

Following the Council Meeting in Osaka, there have been 9 meetings with the Presidents, Immediate Past Presidents and Secretaries General of IAEG, ISRM and ISSMGE, namely: Paris - 11 November 2005; Amsterdam - 11 May 2006; Nottingham - 8 September 2006; Lisbon - 22 January 2007; Paris - 9 June 2007; London- 25 January 2008; Ghent-12 May 2008; Madrid - 19 September 2008; and Cairo - 28 February 2009.

My communications with ISSMGE Members were established, namely by: (1) My letter to the Member Societies giving information about FIGS, July 2006; (2) Correspondence exchanged with Member Societies (my letter November 2007); (3) My meetings with the Member Societies; (4) My messages in ISSMGE News N°4, ISSMGE Bulletin Issue 1, my Message for ISSMGE Bulletin, Volume 2, Issue 1. March 2008 and La Lettre de Geotechnique N° 41 and N° 44; (5) Documents sent to Brisbane Council meeting (2007) and Alexandria Council meeting (2009).

It was agreed by the Presidents that the respective Councils should discuss the Cooperation Agreement and take a decision by voting whether or not to accept this formal cooperation.

The Councils of the IAEG (6 September 2006), ISRM (7 November 2006) and ISSMGE (21 October 2007) have approved the Cooperation Agreement.

For FIGS president election there were 2 candidates Prof. Ricardo Oliveira proposed by IAEG and ISRM and Prof. William Van Impe proposed by ISSMGE. As in January 2008 an e-mail ballot had been held which resulted in a tied vote of 3 votes for each candidate, a second voting took place in February. William Van Impe, having received the majority of votes was duly elected as President of FIGS.

On August 2008, ISSMGE president wrote a letter to the chairpersons of JTC 1, JTC2 and JTC4, hosted by ISSMGE, recognizing their important role, thanking their co-operation and informing that since then these JTCs were transferred to Fed IGS.

"We shall not cease from exploration. And the end of All our exploring will be to arrive where we started and know the place for the first time".

T.S.Eliot

9. SECRETARY GENERAL

I have prepared on 28 January 2006 the Agenda for Rome Board meeting 15 March and included in item 15 "Office of the Secretary General" (ISSMGE Statutes and By-laws 10, 10B.1, 10B.2).

During Board meeting in Tunisia (Item 13) on 15 March 2007, I have reported the proposal of the Appointed Committee for the Secretary General and Secretariat. The Board, following 10B.1 of ISSMGE By-Laws, has approved. This decision was transmitted to the Member Societies, on May 2007, integrated in the package of documents to be discussed and approved by ISSMGE Council in Brisbane on 21 October 2007.

Related the Secretary General Prof. Neil Taylor and the Administrative Officer Mrs. Paloma Peers I would like to stress:

They help me to remove the blocks I count on them in so very many ways. They support my work to advance my Mission to serve ISSMGE, to live this highest goals.

10. TASKS FORCES

During Board meeting in Rome the Terms of Reference of Task Forces were discussed and the following TFs were created: TF Industrial Liaison leadered by John Seychuk, TF Information Technology leadered by John Carter, TF Geo-engineering Resources/Education leadered by Waldemar Hachich and co-leadered by Mounir Bouassida, TF Communications leadered by Osamu Kusakabe, TF Professional Practice and Policy Documents leadered by John Christian and co-leadered by Madhira Madhav, TF Role and Format of International Conferences leadered by John Carter and co-leadered by Roger Frank.

Message from the President (continued) By Professor Pedro Sêco e Pinto

Michael Lisyuk was charged of Finance and Budget Committee.

In dealing with Task Forces we had a mantra: Constantly daring to make the things better. Keeping on innovating, as growth, evolution and reinvention sustain the life.

We consider that failure helps us to get closer to our dreams, equipped us with more knowledge and that success and failure go hand in hand.

11. BOARD MEETINGS

The list of the Board meetings is the following: - Board meeting of Rome, on 15th March 2006; - Board meeting of Curitiba, on 1st September 2006; - Board meeting of Tunis, on 15th March 2007; - Board meeting of Brisbane, on 20 th October 2007; - Board meeting of St Petersburg, on 15 June 2008; - Board meeting of Bangalore on 19th December 2008; - Board meeting of Orlando on 14th March 2009; and Board meeting of Alexandria on 3rd October 2009.

We made the time to think, plan and reflect. We believe that there is but one failure in life and that is the failure to try. We have devoted to ISSMGE considering what fun is life without a hint of mystery? What joy is life without a little adventure? We have taken incremental steps, as step by step we get to the goal.

12. COUNCIL MEETINGS

During this term of 4 years a Council meeting took place in Brisbane, on 21 October 2007. Also a Council meting is scheduled in Alexandria, on 4 October 2009.

I have treated you with the highest respect. Please forgive my mistakes that I have done with the intention to be right.

I believe that good judgement come from experience, experience come from making mistakes and mistakes come from bad judgements. As Bernard Shaw said By the error we reach the truth, but we should not abuse of this practice,

13. TOURING LECTURES/INTERNATIONAL SEMINARS

In my Message for ISSMGE News, N°6, November 2006 I have stressed that Touring Lectures Program was planned by ISSMGE to disseminate the current state-of-the art/practice amongst geotechnical engineers involved in the design and practice in developing countries.

The first Touring Lectures took place in Lagos, 2001 and the second one in St. Petersburg, in 2004.

During the tenure 2005-2009, 21 Touring Lectures/International Seminars were organized, namely:

• In 2006 took place in Chile, in Paraguay and in Tunisia;

• In 2007 Touring Lectures took place in Vietnam, in Albania, in Croatia, in Costa Rica, in El Salvador, in Indonesia, in China and in Sri Lanka;

• In 2008 took place in Nigeria, in Ecuador, in Pakistan and Macedonia;

• In 2009 took place in Cambodia in Laos, in Myanmar, in Hungary, in Ghana and in Mozambique.

From the collected experience to organize a Touring Lecture/International Seminar there is a need of 4-6 months of preparation and to exchange around 60 e.mails with the Host Society and the Lecturers.

I will summarize this rich experience in the following words:

There is still much darkness in the world. But trust me, there is also more light in it than ever. So many people have come to realize that we can curse the darkness or we can have the courage to be one who lights a candle.

We want all of you to make part of our community, to promote our growth and to make you feel that you are contributing for our dream come true.

I enjoy interacting with people, because I believe when people like me, know me and trust me they will help me with new ideas and interesting insights.

I was asked Pedro what keeps you going? What is the source of your energy? Who inspires you? My answer was You. Thank you for the privilege to work together.

In dealing with transference of knowledge we should not forget the memorable lines of Voltaire

"Il en est des livres comme du feu dans nos foyers On va prendre le feu chez son voisin,

On l`allume chez soi,

On le communique à d'autres

Et il appartient à tous ».

Message from the President (continued) By Professor Pedro Sêco e Pinto

14. ISSMGE BULLETIN

For the occasion of the ad-hoc Board meeting that took place in Osaka, 13 September 2005, I proposed the establishment of Task Force on Communications to lunch ISSMGE Bulletin as the upgrade version of Newsletter. I have invited Osamu Kusakabe, ISSMGE Board Member to chair this Task Force.

In my message for the occasion of Volume 1, Issue ISSMGE Bulletin, March 2007, first issue, I have expressed my great pleasure to address to all the members. In order to make ISSMGE News more attractive to all ISSMGE Bulletin has been devised to include a message from the president or vice presidents, current TC activities, reminiscences, views of young members, case histories, activities of members societies, other news and event diary. Osamu Kusakabe was appointed co-ordinator of ISSMGE Bulletin.

I have stressed that my interaction with Member Societies was helping me to lead the Society with hope exploring the windows of opportunity and creativity whilst considering the past lessons and preparing the future with respect and attention to the Member Societies activities. I always had in mind the best interests of all Member Societies and particularly supporting weaker members, hopefully contributing to the strengthening and cohesion of our Society. We are on the right path, but there is still a long way to go.

To reinforce the editorial capacity of Bulletin a network of young geotechnical engineers in representative geographical areas Africa, Asia, Australasia, Europe and America was established.

It is very important the universality of the knowledge and the need for a permanent renewing.

In my letter of invitation to young members 6 March 2009, I wrote:

"It is important to communicate, to share experiences, to compare methodologies and to monitor the results. The benefits of an open dialogue between the academicians, the researchers, the practitioners, contractors and owners are huge. Through our ISSMGE Bulletin we have the responsibility to interact with the Member Societies and also with the individual members. In a geotechnical world that every day transforms and advances we face new challenges, the role of ISSMGE is to explore new ways and to be a continuous source of inspiration for today and tomorrow. I am confident that ISSMGE Bulletin will contribute for a synergy between academicians and practitioners and will implement co-operation between scientific and technological actors. Joining our efforts we will reach our goals and targets and contribute for the success of ISSMGE Bulletin and certainly for the unity and strength of ISSMGE. I strongly believe that your role in your Region to serve as a contact person for collecting the contributions and your interaction with the Regional Vice President is of crucial importance for the success of ISSMGE Bulletin. I hope to receive a positive response for your nominations for a period of 4 year.

Thanking in advance for your co-operation I should like to transmit a message of hope remembering the lines of Aristotle. "We are what we do

Consistently, So the excellence Is not an act But a practice."

Our common goal is to build a new ISSMGE, providing a space of co-operation and solidarity, emphasizing the core values of liberty, generosity, respect, initiative, creativity and mutual support. My belief was that Bulletin would certainly become a vehicle for a better approach and interaction among all ISSMGE members.

The intellect of man is forced to choose perfection of the life or of the work W.B. Yeats. The Choice.

15. ISSMGE JOURNAL

It is my hope that the spirit of cooperation fostered by Case Histories Journal will encourage additional projects and will contribute to the advancement of the state-of-art and state-of-practice of geotechnical engineering. As this world is moving in the direction of a global village there is a need of a universal knowledge and a permanent update and renewing. Communication, transfer of experiences and information, discussions of the methodologies and results are the key words. In this geotechnical world that always change and progress we are facing new challenges that demand great exigency and austerity. The scientific truth is not definitely achieved, demands from all of us a permanent and continuous effort.

A link was established between ISSMGE website and International Journal of Geoengineering Case Histories and the following information is given: -Mission and Areas of Interest

-Mission and Areas of Interest Characteristics of the Journal Procedures for review and publication of submitted manuscripts Editorial board membership Present impact to the Professional.

Within this framework a volume will be issued on September 2009 and a second volume on December 2009, followed by issues with a frequency quaternary.

Message from the President (continued) By Professor Pedro Sêco e Pinto

On October 2010 a Special Volume will be published covering ISSMGE 75 Years Celebration.

Let us discover our destiny provided we have done the preparation and inner work required to seize the opportunity when it presents itself.

16. MEETINGS WITH MEMBER SOCIETIES and GEOTECHNICAL GROUPS

During this tenure I had 83 meetings with Member Societies and other Geotechnical Groups.

The issues discussed included Technical Committees, the Federation of International Geo-engineering Societies, National or Regional Conferences linked to ISSMGE, 17th ICSMGE, Alexandria, 2009 and any other items of local interest.

Remember that each day, life will send little windows of opportunity. Your destiny will ultimately be defined by how you respond to these opportunities.

As you live your days, so you craft your life.

17. RELATIONSHIP WITH SISTER SOCIETIES AND OTHER SOCIETIES

I attended IAEG Council meeting in Nottingham, on September 2006.

Also I had the opportunity to attend the following Council meetings of ISRM: in Singapore, 7 November 2006, in Lisbon, 12 July 2007, in Tehran, 23 November 2008, in Hong Kong, 18 May 2009.

I have exchanged several letters with other International Societies, namely IGUS (International Union of Geological Science), ITA (International Tunnelling Association) and IGS (International Geosynthetics Society).

Related with co-operation with IGS, Joint Sessions were organized for the occasion of Conferences.

I also attended ITA Council meeting in Budapest on 24 May 2009 and I have signed with the ITA president an agreement of cooperation between ITA and ISSMGE.

In addition I have participated in the meetings of IGS, ITA, IAEG and IACMAG,

The Chinese say it so well: "A little fragrance always clings to the hand that gives roses" I believe that before anyone will lend you a hand, you must touch their heart.

18. FINANCIAL SITUATION

The overall Cash Balance -Final Balance on December 2004 received by this Board was GBP 307166. The overall Cash Balance -Final Balance on December 2008 transferred by this Board is GBP 421113.

In summary, in spite of all the geotechnical activities implemented during this term of 4 years ISSMGE financial situation is healthy with an increased of 37% of overall Cash Balance.

We should not forget Einstein's definition of insanity: "Doing the same things and expecting different results". If I wanted new results in my life I knew I had to behave in new ways. Other wise my life would look the same, until my end.

19. ISSMGE - 75 Years Celebration

I have reminded the Board in Orlando, on 14th March 2009, that the International Society for Soil Mechanics and Geotechnical Engineering had its origins at the 1936 International Conference held in Cambridge - Massachusetts. Thus, the 75th Anniversary would be in 2011, and I suggested that there could be special sessions at each of the Regional Conferences that year as a mark of celebration. Also a Special Session should take place during the 6th International Congress on Environmental Geotechnics in New Delhi, November 2010. The celebrations of the 75th Anniversary would then take place during 1 full year from November 2010 to November 2011. A Special Number of Case History Journal should also be prepared to integrate special contributions made for the occasion and individuals who had had an active role within ISSMGE could be asked to write a short paper giving their views on ISSMGE and the history and/or future of the geotechnical engineering profession.

Bernard Shaw said: "The reasonable man adapts himself to the world; the unreasonable one tries to adapt the world to himself. Therefore, all progress depends on the unreasonable man".

Message from the President (continued) By Professor Pedro Sêco e Pinto

20. FINAL COMMENTS

Let me pay tribute to the Past ISSMGE Presidents Ralph Peck, Victor de Mello that have passed away on February 18, 2008 and January 1, 2009. In spite of their physical absent they are still with us, following Psalm of Life-Footprints "Lives of great men all remind us We can make our lives sublime, And departing, leave behind us Footprints on the sands of time".

It is important to join the human resources of our geotechnical society, to catalyze our energies to overcome inertias, to feed our dream, to obtain answers to our questions and to open new horizons following the memorable lines of Montaigue "C`est un grand ouvrier de miracles l`esprit humain".

We need to humble recognize that we have not yet achieve our goals related the progress of the knowledge and we have not been capable to communicate with important sectors of our Society. We need to hear the voice of the youth, to renew the old practices and to promote innovation and new findings. Following William Hazlitt memorable lines.

"A great passion for the object will assure success because the wish for the purpose will show the means".

Last but not least, I would like to address to all International Member Societies a word of praise and gratitude for your contributions and a message of hope that your continuous support will allow us to overcome the difficulties, to develop a feeling of universal responsibility and to create the ambition to better serve our beloved ISSMGE.

Please remember that: When you get back to doing those Things that lifted your spirit and sent you soaring, You reconnect with that state of happiness That you may have lost.

Trust that the winter of your sorrow will yield to the summer of your joy, just as the brilliant rays of the morning always follow the darkest part of the night.

21. THANKS

I am blessed to be accompanied by many extraordinary people. Without them, it would not be possible for me to do what I do and to advance my mission of serving ISSMGE.

It is important to express my gratitude to the Board members. Many thanks for your encouragement. You have offered me a foundation of inspiration and unforgettable support.

I was blessed by my Family, my wife Teresa and children Isabel, David and Jorge whose wisdom, patience and kindness have shape me that words can not express.

Special thanks to LNEC (National Laboratory of Civil Engineering), Foundation Luso Americana (FLA), Mota e Companhia and Teixeira Duarte for their support.

This journey was an unforgettable experience. But I do not forget that in spite of I have tried to make a lots of things, still a lot of things have remained and need to be done.

I love Bono, lead singer of U2, statement: "I used to think that one day I `d be able to resolve the different Drives I have in different directions, the tensions between the Different people I am. Now I realize that who I am. I do feel, I `m Getting closer to the song in my head. I wasn`t looking for grace. But luckily grace was looking for me".

I always remember Goethe lines: "The duty accomplished leaves always A feeling of guilty, as we never did Absolutely everything".

TC Activity

TC38: Soil-Structure Interaction

Chairman: Prof. Vladimir Ulitsky (Russia) and Secretary: Dr. Michael Lisyuk (Russia)

The TC38 was set up for years ago during the 16th ICSMGE in Tokyo. It comprises of 8 core members and 24 appointed members from 28 countries. The Terms of Reference of TC 38 are:

1. To promote co-operation and expertise exchange within the area of soil-structure interaction amongst the leading research and design institutes and universities world-wide as well as amongst the largest contractors with the objective to enhance overall engineering and research expertise within this area.

2. To identify examples of well-documented case histories involving soil-structure interaction.

To analyse the case histories using various soil-structure interaction models and to compare the results with the real observations.
 To serve as an organizational support in promoting and advancement of new calculation methods in soil-structure interaction, as well as in development of related interactive monitoring and application of the observational method with possibility of adjusting design decisions during the construction process.

5. To organize workshops and conferences on soil-structure interaction, and further inclusion of related sections into international (regional) scientific geotechnical conferences. To report on the results of its activities at these conferences.

6. To prepare a guide giving recommendations for practitioners' approach to soil-structure interaction problems.

Activities of TC 38

Following the proposal of core members prof. M. Jamiolkowski and prof. W. Van Impe it was decided that one of the main goals of TC38 must be submission and analysis of well-documented case histories, comparison of the analysis results and development/improvement of methods of soil-structure interaction (SSI) calculations, and preparation of guide on SSI.

Five case histories have been collected and analyzed so far.

1. M. Ervin. Remedial piling and settlement. Twin residential towers.

2. V. Ulitsky, C. Shashkin, M. Lisyuk. Development of settlements of buildings founded on soft soils in Saint Petersburg.

3. W. Van Impe. Case history on the embankments on soft soil in underwater conditions.

4. Yasser El-Mossallamy. Performance of deep excavation in overconsolidated clay: Case History - Japan Center, Frankfurt, Germany.

5. T. Newson and M. Kanungo. Buried reinforced concrete box culvert.

After completing analysis of the case histories there will be a continuous work on preparation of a guide giving recommendations for practitioners' approach to soil-structure interaction problems. In such a way, the guide will be based on the results of computations and comparison with the observational data on behavior of real building and structures.

Scientific programme for the second term of TC38 work was developed. This programme will be sent to all core members and members of TC38 for discussion. After discussion and improvements/corrections the programme will be presented at the meeting of TC38 members in Alexandria, Egypt, on 3 October 2009, before the 17th ICSMGE.

The major events which were organized in 2006-2009

- Meeting of members of TC 38 (XIII Danube European conference in Ljubljana, 28-31 May 2006).
- Workshop "Basics of soil-structure interaction. Soil characterization and determination of soil parameters for use in soilstructure interaction analysis" (8-9 September 2006 - Saint Petersburg, 12-13 September 2006 - Ghent).
- Workshop "Use of soil-structure interaction principles for design of high-rise buildings" (14 May 2007 Saint Petersburg, 17-18 May, Shanghai).
- orkshop and meeting of members of TC 38 (XIV European Conference SMGE (24-28 September 2007, Madrid).
- General report at the XIV European Conference SMGE (24-28 September 2007, Madrid).
- Invited lecture at the scientific workshop "Theory and practice of soil-structure interaction" (8-9 October 2009, Istanbul). Participation of TC 38 members in the Touring lectures in Indonesia on Soil-Structure Interaction (17-19 October 2007, Jakarta) following the invitation of ISSMGE President prof. P. Sêco e Pinto. International geotechnical conference "Development of cities and geotechnical engineering" (Saint Petersburg, 17-19 June 2008).
- Meeting of TC38 members (Saint Petersburg, June 18, 2008).
- orkshop on preservation on preservation of historical monuments with account of soil-structure interaction "Our Heritage and Science" (Saint Petersburg, 17 April 18, 2009). The workshop was organized under the auspices of TC38 and St.
- Key-note lecture at the National workshop on high rise constructions (Hyderabad, India, 22-23 May 2009).

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TC Activity (continued)



International geotechnical conference "Development of cities and geotechnical engineering" (Saint Petersburg, 17-19 June 2008). Chairmen of the Plenary Session on 16 June 2008.

Left to Right: Prof. V.M. Ulitsky (Russia), Prof. P. Seco e Pinto (Portugal), Prof. W. Van Impe(Belgium), Dr. M.B. Lisyuk (Russia)



International geotechnical conference "Development of cities and geotechnical engineering" (Saint Petersburg, 17-19 June 2008). The Session on Soil-Structure Interaction was held in the historical Imperial Hall of St. Petersburg State Transport University

The next Meeting of TC38 members will be in Alexandria, Egypt on 3 October 2009, before the 17 ICSMGE. During this meeting future work of TC38 and preparation of the guidelines for soil-structure interaction will be discussed.

TC 38 also is one of co-organizers of the International geotechnical conference "Geotechnical Challenges in Megacities" (Moscow, Russia, 6-10 June 2010).

This conference is organized by NIIOSP Institute (Moscow) and TC38 "Soil-structure Interaction" jointly with TC28 "Underground Construction in Soft Ground", TC32 "Engineering Practice of Risk Assessment and Management", and TC 41 "Geotechnocal Infrastructure of Megacities and Capitals".

Meeting of members of TC38 is planned during this conference.

Conference topics are:

- Construction in restrained urban areas (Foundations for high-rise buildings, Deep excavations, retaining structures, diaphragm walls, Tunnels for underground transport infrastructures, etc.)

- Preservation of existing structures taking into account soil-structure interaction (Effect of new buildings and constructions on underground structures, Effect of new structures on existing buildings, etc)

- Urban environmental geotechnics: (Geofailures and risk assessment, Construction on contaminated soils, Preservation of hydrogeological situation, Improved soils, etc).

Reported by Prof. Vladimir Ulitsky, Chair of TC38 and Dr. Michael Lisyuk

TC Activity

TC 3: Geotechnics of Pavements

The International Technical Committee, TC 3 "Geotechnics of Pavements", of the International Society for Soil Mechanics and Geotechnical Engineering - ISSMGE, started in 2001 under the proposal of the ISSMGE Board 2001 - 2005. It follows the previous activities of ETC 11 (1997-2001). During all these activities an important dissemination work was done that culminated in four important publications: "Unbound Granular Materials. Laboratory Testing, In Situ Testing and Modelling" (Gomes Correia, 2000), "Compaction of soils and granular materials" (Gomes Correia & Quibel, 2000), "Geotechnics for roads, rail tracks and earth structures" (Gomes Correia & Brandl, 2001) and "Geotechnics in Pavement and Railway Design and Construction" (Gomes Correia & Loizos, 2004).

TC3 activities during 2005-2009

1. Participation in related events promoting and disseminating TC3 activities (WP1, 2 and 3)

1st International Seminar on Earthworks in Europe. Palais des Congrès, Paris, 26-27/10/2005.

"Development of modern transportation infrastructure: role of geotechnical engineering", session 6, part of the XIII Danube European Conference on Geotechnical Engineering, Ljubljana, Slovenia, 29-31/05/2006.

British Geotechnical Association, 2006 Touring Lecture. "Geotechnics for pavements and rail tracks. Innovations in construction and design", 14 de November in Glasgow (Scottish Geotechnical Group), 15 November in Swansea (South Wales Geotechnical Group) and 16 November in Wokingham (Southern Geotechnical Group, TRL).

International Conference on Railway Management and Engineering at the University of Palermo, Italy, April 1-4/04/2007.

Keynote Lecture at the RailFound 06 - Railway Foundations 2006. Applied research and application to underpin improved railway track design and performance. (G.S. Ghataora & M.P.N. Burrow (edts.)). University of Birmingham Press, Birmingham, 11-13/09/2006. Theme Lecture at the 3rd International Conference on Site Characterisation. Geotechnical and Geophysical Site Characterization (TC 16). (An-Bin Huang & W. Mayne (edts.)). Taylor & Francis/ Balkema, Leiden, The Netherlands. Tapei, Taiwan, 1-4/04/2008.

Interaction Soil-Railway Track for HST, International Seminar organised by the Portuguese Geotechnical Society, University of Minho, National Laboratory of Civil Engineering, New University of Lisbon and Technical University of Lisbon - IST, with the sponsorship of RAVE (High Speed Railway Network), REFER (National Railway Network) and the Foundation for Science and Technology, Lisbon, Portugal, 23-24/09/2008.

2nd International Seminar on Earthworks in Europe. Royal Geographical Society, London, UK., 3-4/06/2009.

Eighth International Conference on the Bearing Capacity of Roads, Railways and Airfields. University of Illinois at Urbana-Champaign, 29/06-2/07/2009.

Keynote Lecture at the GeoHunan International Conference "Challenges and Recent Advances in Pavement Technologies and Transportation Geotechnics", in Hunan, China, 03-06/08/2009.

2. TC3 Workshop on Management of Materials for Infrastructures in Urban Environments, Madrid, 23th September 2007.

The intent of this Workshop was to bring together researchers, practitioners, designers and constructors to discuss and to share their experience and to find new challenges for the future on the management of materials for infrastructures in urban environments. The Workshop was organised by A. Gomes Correia (TC3 chair) and local members of CEDEX: Dr. F. Pardo de Santayana and Dr. H. Cano Linares. This was a well attended workshop (30 participants) in connection with the XIV European Conference on Soil Mechanics and Geotechnical Engineering (XIV ECSMGE, 2007). Appendix 2 presents the Workshop contributions by TC3 members and invited speakers.

Two main sections were carried out encouraging speakers/audience interaction under the control of a moderator, highlighting the latest developments in research and practice. The technical themes discussed were:

- Recycling materials
- Innovations in construction
- 3. 1st International Conference on Transportation Geotechnics, Nottingham, 25-27 August 2008 (WP4)

The conference was held at the University of Nottingham's Jubilee Campus, UK. The conference, under the umbrella of TC3, was organised by the Nottingham Centre for Geomechanics (NCG) and Nottingham Transportation Engineering Centre (NTEC). The 7th International Symposium of Unbound Aggregates & Roads (UNBAR 7) was included as a theme in this conference.

University of Nottingham is generally regarded as the home of pavement engineering and associated geotechnics in the UK, and as a result it has been selected by TC3 of ISSMGE to host the 1st International Conference on Transportation Geotechnics. Prof. Hai Sui Yu, TC3 core member, was invited to be the chairman of the Organising Committee.

The conference comprised parallel sessions over a 3 day period, including keynote lectures, oral presentations, discussions and posters (Appendix 3). The Sessions were chaired by internationally recognised academics and practitioners.

Professor Mike Jamiolkowski participated in the opening ceremony addressing to the participants the challenge of geotechnics in transportation infrastructures.

Specific themes presented and discussed during the conference were:

TC Activity (continued)

- Unbound aggregates (UNBAR 7).
- Slope instability, stabilisation, and asset management.
- Construction on soft ground.
- Interaction with structures and geogrid reinforced soil.
- Effects of climate change and vegetation.
- Highways, pavements and subgrade.
- Railway geotechnics.
- Soil improvement.

The conference offered five keynote lectures on the following topics :

- "The Role of Soil Viscosity on the Behaviour of Reinforced Embankments", by Professor Kerry Rowe;
- "Recent Research on Railway Track Sub-base Behaviour", by Professor William Powrie;
- "Applications of Reinforced Soil for Transport Infrastructure" Professor Alan McGown and Professor Stephen Brown;

- "Unified Constitutive Modelling for Pavement Materials with Emphasis on Creep, Rate and Interface Behavior", by Professor Chandra Desai;

- "Innovations in Design and Construction of Granular Pavements and Railways", by Professor A. Gomes Correia.

Prominent members of TC3 gave important oral presentations and made contributions to the proceedings. Over 140 participants from 26 countries registered to this important Conference, and the proceedings contain 100 reviewed papers The proceedings of this conference is available from CRC Press Taylors & Francis/ A Balkema (Ellis et al., 2008).

4. Committee Meetings

During the current term of the Committee (2005-2009) three formal meetings were held:

- TC3 meeting, Nottingham, 21st November 2006 (11h00-17h00) at University of Nottingham, Nottingham Centre for Geomechanics.
 TC3 meeting, Madrid, 24th September 2007 (12h30-14h00) at Palacio de Congresos y Exposiciones de Madrid, room 29, in
- connection with TC3 workshop and the XIV European Conference on Soil Mechanics and Geotechnical Engineering.
- TC3 meeting, Nottingham, 26th (17-18h15); 27th (13h20-13h40) August 2008 at University of Nottingham, New Business Center, room A07, in connection with the 1st TC3 International Conference.
- 5. Website

The TC3 uses a website that allowed the dissemination of information, events announcements and email correspondence between its members. It is currently located at: www.webforum.com/tc3/home/index.asp?sid=598&mid=1

6. WP Summary

The tasks of the Committee (WP) were largely met; in particular WP2 and WP4 were very successful and completely accomplished. An important work has been realized by Dr. Alain Quibel promoting liaison at CEN level to standardize continuous compaction control. In fact, he put a great effort in European works to clarify the functionalities of the equipments proposed for intelligent compaction. The players involved in the project are: the ISSMGE TC3 committee (represented by Dr. Alain Quibel), who request the need of clarification; the "Road Equipment Committee" of the CFTR (French committee for road techniques), composed of manufacturers, contractors and administration members, who pointed out the intelligent compaction as a task; the CISMA (Trade association of manufacturers and suppliers for the construction, infrastructure, steel, and material handling), who attends the CFTR road equipment, is at the moment handled by CISMA general secretary. At this stage an agreement was attained between the main manufacturers concerning a global approach for the description, in a harmonized way, of the main functions of their devices for intelligent compaction. This work should continue and will be in the future the main framework to implement worldwide the compaction management (more appropriate term than intelligent compaction).

The 1st International Conference on Transportation Geotechnics (the 1st of the series to be organized by TC3 members) organized by Prof. Hai Sui Yu and his colleagues at the University of Nottingham was very successfully and entirely accomplished (WP4). It should be stressed the important interaction observed during this Conference between geotechnical and pavement engineers, academics and researchers, which is one of the aims of the TC3 Committee.

The works of WP1 and WP3 were largely disseminated in the events organized by the Committee and in the related Conferences. The Journal on "Geotechnics for Pavements in Transportation Infrastructures" (WP5) is still in negotiation with a publisher and will be very soon a quarterly journal of the Committee. The aim is to publish high quality, theoretical and applied papers on all aspects of geotechnics for roads, highways, railways, airfields and waterways.

Future activities

 2^{nd} TC3 International Conference on Transportation Geotechnics, will be organised by the TC3 Japanese domestic committee under the umbrella of the Japanese Geotechnical Society (Chairman is Professor N. Yoshida and Dr. Momoya is secretary). The Conference will be held in Hokkaido University Conference Hall, Sapporo, Japan. It is planned that this conference will have more interaction with the IAGE, ISRM, IGS and the TC of ISSMGE in the related matters (Environment, non-saturated soils, frost).

Another important output will be the Journal of the Committe on "Geotechnics for Pavements in Transportation Infrastructures". Other activities and possible revision to the Committee's terms of reference may be decided by the incoming Committee and its chairman.

Reported by A. Gomes Correia (University of Minho, Guimarães, Portugal)

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TC Activity

TC 3, TC4 and TC41

 3^{rd} International Geotechnical Symposium 2009 on Geotechnical Engineering for Disaster Prevention and reduction (photo Ne1) was held at the Harbin Institute of Technology from 23-25 July 2009 under the organization ATC-3, TC-IV, TC-41 of ISSMGE under auspices of the Harbin Institute of Technology and Kazakhstan Geotechnical Society. 102 participants from 10 countries attended the Symposium. 100 papers were presented and discussed during the technical session under the following topics:

- 1. Geomonitoring and analysis of the geodynamic processes, prognoses of natural phenomena
- 2. Geotechnical measures for natural disaster reduction of structures
- 3. Geotechnical engineering in special conditions
- 4. Geocology of extreme situations
- 5. Geoenvironmental engineering





3rd IGS 2009 International Geotechnical Symposium Geotechnical Engineering for Disaster Prevention and Reduction (22-24 July,2009, Harbin, China)

Keynote lectures were delivered by Prof. Chen Zuyu (China Institute of Water Resources and Hydro-Power Research, elected Vice-President for Asia of ISSMGE since October 2009-2013, Beijing, China "Damages in Wenchuan earthquake and hazard mitigationlessons we have learned"; Prof. Askar Zhusupbekov (Eurasian National University, President of Kazakhstan Geotechnical Society, Astana, Kazakhstan), "Geotechnical investigations of problematical soil ground in Kazakhstan"; Prof. Takaji Kokusho (photo №3), Chairman of TC-IV (Chuo University, Tokyo, Japan), "Seismic amplification between base and surface using average Vs in equivalent surface layer"; Prof.Sergey Kudryavtsev (Fare East transport state University, Khabarovsk, Russia), "Research and development of rational structure of pavement using integral geogrid for section of Chita- Khabarovsk highway"; Prof. Eun Chul Shin (photo №4), Core member of TC-41 (Director Researcher Center of Disaster Prevention of University of Incheon, Incheon, Korea) "Disaster Prevention strategy and Case Study in Korea"; Prof. Susuma Yasuda (photo №5) (Chairman of ATC-3), "Damage to sewage and gas pipelines during the 2007 Niigataken-chuetsu-oki earthquake in Japan"; Prof. V.N. Paramonov (The Saint-Petersburg State Transport University, Saint-Petersburg, Russia) "Providing Safety and Reliability during Reconstruction and Preservation of Historical Cities" (photo №6).

At 24 July at Harbin was be technical tour by boat to Sungari river for investigation of coastal geotechnical area of Harbin city.

Organizing Committee decided of next venue of 4 IGS on Geotechnical Engineering Disaster Prevention and Reduction, which will be held at Khabarovsk (Russia) at July 2011 with technical tour to Baykal lake (Russia).

At 25 July Organizing Committee also prepared Post-Forum technical tour (2 days): Harbin-Wudalianchi (world geological park)-Harbin

Reported by Professor Tao Xiaxin (Chairman of Organizing)

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Activity of Member Tunisian Society of Soil Mechanics (ATMS)

The Tunisian Society of Soil Mechanics: "Association Tunisienne de Mécanique des Sols" (ATMS) was created in 1985. Its membership in ISSMGE began with 10 ISSMGE members. During the nineties ATMS was not able to develop continuous and significant activities either nationally nor internationally. Since 1999, ATMS endeavoured with young and motivated committee members, both from academic and industrial sides, to organize National seminars, as well as international meetings. From 2003 ATMS has been paying membership fees regularly, and doubled its ISSMGE membership to 20 members. Greater efforts have been made recently; all statistics clearly show how ATMS can be classified as one the most active African society from 2005 to date. The ATMS has launched its website <u>www.atms.org.tn</u> in April 2007.

2005

An international conference was organized on 25 - 26th March on « Soil compaction ». This event was preceded March 24 by two courses. The conference proceedings were composed of 23 papers (254 pages), and a separate edition of two documents of a practical course. This event was attended by one hundred and twenty (120) participants from seven countries (Tunisia, Algeria, Côte d'Ivoire, France, Irak, Sénégal, Qatar). Five oral sessions included two keynote lectures and twenty one oral presentations.



Technical seminar about « Radès La Goulette Bridge project »



International conference on « Soil compaction »(2005)

3rd December: Technical seminar about « Radès La Goulette Bridge project ». For this first stay cable bridge in Tunisia there were four oral presentations about geotechnical campaigns, foundation solution and related design and methods of construction.

2006

29th April: Technical seminar about « Pressure meter ». Four oral presentations were devoted to the practice, the interpretation and design issues from pressuremeter data. December 15th & 16th: ISSMGE international seminar on « Reinforcement techniques and soil improvement: from theory to practice ». A detailed report is available in ISSMGE bulletin of News (volume 1, Issue 1, 2007).

2007

March 15th: ISSMGE board meeting at National Engineering School of Tunis. March 16th & 17th (Hammamet): 2nd African Conference of Young Geotechnical Engineers. A detailed report is available in ISSMGE bulletin of News (Volume 1, Issue 2, 2007).

2008

April 25th: (Tunis) technical seminar about « Big excavations in urban areas ». October 18th (Sfax City): technical seminar about « Taparura project ». A visit to the project site was organized. December 11th & 12th (Tunis). Training course on Design of retaining structures by the use of finite element code PLAXIS v8 and K-REA software (in collaboration with French committee of soil mechanics).

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Activity of Member (continued)

Tunisian Society of Soil Mechanics (ATMS)



Technical seminar about « Big excavations in urban areas »(2008)



Training course on Design of retaining structures (2008)

2009

January 31st: Technical seminar and visit to site (Enfidha) of Zine El Abidine Ben Ali Airport project March 13th & 14th (Hammamet): International technical seminar on

« Geosynthetics ».

April 17th & 18th (Tabarka): technical seminar on \ll dams ». A visit to dam being in Tabarka was organized.

ATMS has also contributed to pay fees for Tunisian young members who have the best papers to participate to the 4 iYGEC'09 in Alexandria- Egypt.

Finally, In July 2009 ATMS has increased its ISSMGE membership to forty that shows the interest for playing much more significant role in the African region.



Technical seminar and visit of Zine El Abidine Ben Ali Airport project (2009)

Reported by Samia Bousetta (General Secretary of ATMS) and Dr Imen SAID

Professor Prof. Bengt Baltzar Broms

Reminiscences

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Interviewer: Interviewer: K. Rainer Massarsch, former student of Prof. Broms Location: Residence of Prof. Broms in Stockholm, Sweden.

Bengt Baltzar Broms was born in Örebro, Sweden on 17 June 1928. He obtained his C.E. degree in 1952 from Chalmers Institute of Technology, Gothenburg, Sweden, continuing postgraduate studies at the University of Illinois, Urbana, toward M.S. and Ph.D. degrees in 1954 and 1956, respectively.

From 1956 to 1959, Dr. Broms was employed as a Research Engineer in the Shell Development Company in Houston. In 1959, he joined Cornell University, Ithaca, New York as Associate Professor. He returned to Sweden in 1964 to take up the position of Director General of the Swedish Geotechnical Institute, Stockholm. From 1974 to 1982, he was Professor of Soil and Rock Mechanics at the Royal Institute of Technology (KTH), Stockholm. He joined Nanyang Technological University in Singapore in 1983, where he was Professor and Head of the Division of Geotechnics and Surveying until his retirement at the end of 1995.

Prof. Broms has actively served the international geotechnical community in numerous capacities, including Vice-President for Europe (1977-81) and President (1985-89) of the International Society of Soil Mechanics and Foundation Engineering (ISSMFE).

Prof. Broms' research includes cracking in reinforced concrete members, lateral resistance and buckling of piles, lateral earth pressure due to compaction, vibratory compaction, lime columns, negative skin friction, concrete piles, geotextile-reinforced earth, penetration testing, landslides and soil improvement methods. He is the author and co-author of more than 400 papers, book chapters and books.

Prof. Broms is member of the Swedish Academy of Engineering Sciences, Honorary Member of the Swedish Geotechnical Society, Commander of Nordstjärneorden and Honorary Professor at Tongji University, Shanghai. He has received many awards in Sweden and abroad for his scientific achievements.

KRM: Thank you Bengt for sharing this afternoon with me. You are on your way to your summer house in Dalarna (a province in central Sweden close to the border with Norway). I know that you have invited many visitors to your summer house - sometimes they were encouraged to help with repairing the house and painting walls, I have been told!

BBB: Yes, we have had many visitors to Stockholm and most of them enjoyed seeing the Swedish countryside. This is a place where I was able to get away from a sometimes rather hectic schedule.

KRM: I understand that your father also was an engineer - did this influence your choice of profession?

BBB: I was the only child and my father was proud that I was interested in engineering. I took my civil engineering degree at Chalmers University of Technology in Gothenburg. Already as a student, I was interested in geotechnical engineering. Prof. Sven Hultin, one of the originators of the Swedish Slip Circle method, was one of the teachers that influenced me.

KRM: I understand that shortly after receiving your C.E. Masters degree at Chalmers, you went to North America?

BBB: Yes indeed, and it was the late Prof. Sven Olov Asplund who suggested me to go to the USA. This was a difficult decision, as I had just met my future wife, Carina. We had little money to start with and only high school knowledge of English. I started working in a small engineering firm in Cincinnati where I became involved in the design of a very large and challenging project - the Ohio Turnpike. We worked on average 10 to 12 hours a day, six days a week.

KRM: And then you applied to the University of Illinois in Champaign, Urbana for masters and thereafter doctoral studies?

BBB: I was granted a research assistantship in the Department of Theoretical and Applied Mechanics. The topic of my PhD thesis was Ultimate Strength of Long Reinforced Concrete Columns, which I did under the supervision of Dr Ivan Viest.

KRM: How did you become interested in geotechnical engineering?

BBB: Well, I attended lectures given by Prof. Ralph Peck. It was fascinating to hear him speak on various engineering projects and the importance of geotechnical aspects. So, most of my course choices were in geotechnical engineering. I also had the opportunity to listen to Prof. Karl Terzaghi, who came occasionally to give lectures. I had much to learn and felt very privileged.

KRM: I understand that there were a number of students at the University of Illinois who later became quite famous.

BBB: Indeed, the late Fazlur Kahn who became one of the leading structural engineers was a close friend. And there was Louis Menard, who did part of his work on the pressuremeter while he was in Urbana, working with Prof. Peck. Prof M. A. Sozen, now at MIT was also a friend.

KRM: Following your Ph D, you joined Shell Development Company in Houston?

BBB: Yes, I was asked to build up a geotechnical laboratory and to participate in the design of the then deepest oil offshore facility - 40 m, which was a record depth. And the design was state of the art, with a bottle-shaped structure to minimize brunt of hurricane waves. One of the challenges was to determine the lateral resistance of piles during wave loading.

KRM: You have told stories about pile load tests in the Louisiana swamps, with alligators watching you at close distance?

Reminiscences (continued)

BBB: At that time, Shell embarked on a large-scale lateral pile load test program. We were going in a small boat and, once, a very big alligator was stopping us; about 7 - 8 m long and obviously interested in geotechnical problems. It was not very encouraging to go on shore and to do the tests. Prof. Lymon Reese and Prof. Hudson Matlock worked on the same project, but mainly on deformation behavior. I studied the ultimate capacity of laterally loaded piles. The work was reviewed by Karl Terzaghi; to work with him was a unique experience.

KRM: This investigation resulted in one of your well-known papers on the lateral resistance of piles. After working for Shell, you went to Cornell University.

BBB: In 1959, Prof. George Winter asked whether I was interested to come to Cornell University and I felt this would be a challenging task. I stayed about five years and enjoyed teaching and research work.

KRM: And then you moved back to Sweden and became Director General of the Swedish Geotechnical Institute in Stockholm!

BBB: There was a vacancy at SGI after its director, Justus Osterman, had suddenly passed away. And I was offered to succeed him. So, we moved back to Sweden, with four children born in the US. I did not then know much about Swedish geotechnical engineering and had to brush up on the Swedish practice of applying soil mechanics.

KRM: How do you see your time at SGI in hindsight?

BBB: At the beginning, I had to get accustomed with many new things, the way of life and the type of work is quite different here, compared to North America. Initially, my main goal was to build a strong team, to hire bright young engineers in Sweden and abroad - you Rainer, and Bengt Fellenius were among a group of outstanding people at SGI. Also the contributions of Nils Flodin, head of the well-known SGI Library were of great importance for the geotechnical community in Sweden but also abroad. I am very proud that SGI became an international gathering place with visitors from many countries. Listing all visitors would be too long and I would still forget a few names.

KRM: For many foreigners, the conferences arranged in Sweden are well known - can you tell a little about them?

BBB: I agree, this is an interesting question. When I became chairman of the ISSMFE Technical Committee on Penetration Testing, together with the late Prof. de Beer time was ripe to summarize the state of the art in Europe and therefore we arranged a European Symposium on Penetration Testing, ESOPT in 1974. I persuaded you to becoming secretary general. Later, ESOPT became global - ISOPT, and a series of conferences on penetration testing and site characterization have been held since.

KRM: One of your main interests has always been piling technology, and especially driven piles? You were very active in the Swedish Commission on Pile Research.

BBB: This Pile Commission is a unique association of the Swedish piling industry with a close cooperation between all; consultants, contractors, researchers, and government. The full-scale tests on negative skin friction, conducted by Prof. Bengt H. Fellenius, have shed light on the settlement mechanism and gave a fundamental understanding of the problem. We also had close cooperation with many experts from different countries, for instance with Prof. George Goble on dynamic pile testing he visited Sweden several times. Also the first Stress Wave Conference were held in Stockholm in June 1980 and the second again in Stockholm in 1984. These conferences have had great importance on the acceptance of dynamic pile testing.

At SGI, we were also very interested in ground improvement methods, and especially methods of stabilizing soft clay - which poses major foundation problems in the Nordic countries. For example, the cardboard drain, invented by the first director of SGI, Walter Kjellman, the plastic drain, invented by Oleg Wager, and the lime column method, invented by Kjeld Paus. These methods have since spread around the world and not many people know that the ideas originated in Sweden.

KRM: The research results in the test field in Skå Edeby - a difficult name to pronounce for foreigners - have played an important role, hasn't it?

BBB: Yes, many new techniques were tested at this site. Stockholm needed a new airport and one of the potential locations was Skå Edeby, with very difficult soil conditions. In 1946, Terzaghi was invited to visit Sweden to study the field conditions at Skå Edeby - he was picked up at Logan airport in Boston by the Swedish Royal Air Force and was the only passenger on the plane. He recommended a series of test embankments, which became the beginning of the, now, national geotechnical test site. When the site was abandoned as location for the airport, the SGI could continue to pursue field studies at the site. For example, in around 1955, driven sand drains installed and tested by Prof. Sven Hansbo, who later became the first professor of geotechnical engineering in Sweden. Terzaghi was also involved in starting a field test in Mällösa, an airport location thought suitable as an alternative at the time. Twenty-five years later, Dr. Y.C. Chang used the tests results for a part of his Ph.D. work, carried out under the supervision of Prof. Peck.

KRM: In 1974, you became professor in soil and rock mechanics at the Royal Institute of Technology (KTH), shortly before SGI was moved from Stockholm? Quite an honor, considering that this was the department at which Wolmar Fellenius as Professor!

Reminiscences (continued)

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BBB: Indeed - and I was entrusted to build up a new department, covering soil and rock mechanics, and later soil dynamics. The number of researchers and doctoral students increased and we were able to maintain close contacts with the international geotechnical community, in spite of the move of SGI from Stockholm. I am also very proud of the work done by many doctoral students at KTH.

KRM: During this period you were also very active in ISSMFE.

BBB: From 1977 until 1981, I served as Vice President of ISSMFE for Europe, with the 10th International Conference being held in Stockholm at the end of my term. One of the persons most strongly working for bringing the conference to Sweden was Prof. Hansbo, then president of the Swedish Geotechnical Society. The Swedish King opened the conference. Also, this was the first conference to introduce the idea of "home hospitality", inviting conference participants as guests to members of the host country. This concept, which has now become a tradition, and many other aspects of the conference were quite successful.

KRM: And in 1985 you became president of ISSMFE.

BBB: I was elected in 1985 at the San Francisco conference, and this was quite an honor for a small country. At that time, I had already moved from Stockholm to Singapore, where I was given the task of starting up a geotechnical department at the newly founded Nanyang Technological Institute, NTI, which later became Nanyang Technological University, NTU. This was a remarkable period not only in Singapore but in the entire regions, with many interesting construction projects just starting up.

KRM: Also there you continued arranging geotechnical seminars and conferences, which attracted many participants from the region and abroad. During your career you consulted on many major construction projects.

BBB: I was fortunate to become involved in several very interesting projects. In Singapore, work on the MRT subway had just started, so I had the opportunity to get involved in some aspects of this complex project. One of my more spectacular project involvements was serving as consultant on the foundation of the Kuwait towers.



Conference in Singapore in honor of Prof. Bengt Broms, 1995

KRM: Your lectures about the collapse of the New World Hotel are quite well-known!

BBB: I was member of the panel that was charged with the investigation of the failure of this hotel in Singapore, which collapsed on March 15, 1986. The story about the design and construction of the hotel sounds like a saga. Only one of three owners could write and read. The piles were driven without knowing the shape of the building. The original structural engineer had also made a serious error in calculating the weight of the building. At the time of the collapse, the six-storey hotel was quite busy, so nobody paid attention when they heard cracking in walls and columns. During a seven-day rescue operation after the collapse, 17 people were found alive, but 33 people lost their lives. As a consequence of the failure, the government of Singapore introduced tighter regulations on building construction.

KRM: Returning to your presidency of ISSMFE, I understand that you had several concerns about the future of the society?

BBB: Yes, at that time, the question of the name of the society was discussed and disputed. It was suggested by some to include the term "geotechnical engineering" - which since has been implemented. Another of my concerns was the low number of young

Reminiscences (continued)

participants at international conferences. With the support of several others, such as the late Prof. Niels Krebs Ovesen of Denmark, the first Young Geotechnical Engineers Conference was organized.

Prof. Robert Holtz, guest researcher at the SGI 1971-1973, assisted in the idea of creating "geotechnical model libraries" for newly established universities, especially in developing countries, to be donated by the society and sponsors. Also individual members were encouraged to contribute. With the evolution of information technology, this idea can now probably be implemented more easily.

KRM: You are the author of several books and many publications. The reader easily recognizes your papers by your hand-drawn figures. You are famous for your personal style!

BBB: I always enjoyed drawing figures by hand. Unfortunately, now I cannot draw any more, my right hand is too shaky.

KRM: Time is passing quickly, so I would like to ask you a final question - which are the most important challenges for the engineering profession and our society in particular?

BBB: Well, no doubt, environmental problems are highest on the list. We need to take care of all waste and - if possible - make use of it. Geotechnical and environmental engineering must be going hand in hand and can offer many effective solutions. Another important question is storage of nuclear waste, also here geotechnical engineering plays an important role.

KRM: Bengt, I do not want to keep you any longer from going to your summer house. Thank you very much for your time!

BBB: It was my pleasure, Rainer!



Dr. K. Rainer Massarsch and Prof. Bengt B. Broms during the interview in Stockholm.



Prof. Bengt Broms and wife Carina during the interview.

Case History

Some aspects of the M6.3 April 6 2009, L'Aquila, Italy, earthquake

By Armando L. Simonelli (Università del Sannio, Email: alsimone@unisannio.it)

On April 6th 2009, 03:32 local time, a strong earthquake hit the town of L'Aquila on the Appenninic chain in central Italy (Fig. 1). The sequence started in December 2008 as a series of small earthquakes and reached its climax in April 2009. Three events above M5 took place on April 6, 7 and 9 which devastated the town and its vicinity. An international team sponsored by GEER project and several Italian-only teams sponsored by AGI and ReLUIS project performed reconnaissance of the event. Most of this note is extracted from their reports ([1] and [2]).



Figure 1. Geodynamic model for the central Mediterrannean (Devoti et al., 2008) and location of L'Aquila earthquake (adapted from [1])

The city of L'Aquila and several small towns along the Aterno river valley suffered severe damage. About 300 people died as a result of the earthquake and several tens of thousands were left homeless. Most of the deaths took place in vulnerable masonry houses which were subjected to unusually strong motions – mainly due to proximity to the fault. In the days following the earthquake, a large number of researchers visited the area. A preliminary report on the main features of the recorded ground motions was compiled by a group of Italian investigators [2] under the umbrella of Italian Geotechnical Association (AGI) and the National Network of Earthquake Engineering Laboratories (ReLUIS) project. A detailed report on seismological and geotechnical aspects of the earthquake was produced by an international group of researchers [1] sponsored by the Geo-Engineering for Extreme Events Reconnaissance (GEER) project. The brief note at hand refers to geotechnical damage and is based on the above works. Information about structural damage is available at ReLUIS web site (www.reluis.it) and elsewhere.

According to Italian Institute of Geophysics and Volcanology (INGV), the main shock took place along a normal fault oriented NW-SE, with local magnitude $M_L = 5.8$ and moment magnitude $M_W = 6.3$. The hypocentral depth was estimated at approximately 10 km. Four accelerometric stations (AQV, AQA, AQG, AQK) were located within the surface projection of the fault and recorded peak values ranging from 0.4 to 0.6*g*. Peak computed ground velocities were estimated at around 35 cm/s. All stations were located in the Aterno river valley, NW of L'Aquila city and in the city itself (Fig. 2).



Figure 2. RAN accelerometric stations in the meizoseismal area around the city of L'Aquila (image from GoogleEarth)

Case History (continued)

Some aspects of the M6.3 April 6 2009, L'Aquila, Italy, earthquake

The moderate-size event of April 6 took place at shallow depth and produced severe ground shacking in the near-fault area, which was limited to approximately 250 km². The city of L'Aquila happened to be within this zone with catastrophic consequences. As shown in Figs. 3 to 5, the recorded motions are characterised by short durations (less than 10s) and high peak accelerations both in the horizontal and vertical directions. In some cases, peak vertical accelerations are higher than the horizontal ones. Also, the strong portions of vertical and horizontal motions occurred almost simultaneously due to the short travel paths of P and S waves from the fault to the ground surface. This is evident in Fig. 4, where the severe horizontal motion appears to start only about 1s after the vertical one, with a predominant period of 0.4-0.6s. These features can be particularly damaging to weak non-ductile systems, such as the old masonry structures in the area.



Figure 3. Accelerometric data of AQV station (42.377N; 13.344E), R_E 4.8 km, R_{JB} = 0. From top to bottom: NS, EW and V components. Uncorrected data by RAN (Rete Accelerometrica Nazionale) of the Italian "Protezione Civile"

Figure 4. Details of acceleration recordings at AQV station, between approximately 6.5 and 10.5s. From top to bottom: NS component (PGA = 550 cm/s², t=8.88s); EW component (PGA= 663 cm/s², t=8.64s); V component (PGA= 508 cm/s², t=7.16s). (adapted from [2])

Figure 5. Fourier spectra of AQV station recordings From the top to bottom: NS, EW, Vertical component (adapted from [2])

Case History (continued)

Some aspects of the M6.3 April 6 2009, L'Aquila, Italy, earthquake

Geotechnical damage was widespread in the meizoseismal area. Here a selection of damage pictures is shown; most of the photos are taken from works [1] and [2]. A wide pattern of ground cracks, in soil and (especially) in road pavements was observed, as evident in Figs. 6 and 7. No conclusive evidence of co-seismic ground rupture has been presented to date. References of possible co-seismic rupture have been made at Paganica and Onna regions.

Several rockfalls, including the severe case shown in Figs. 8 and 9, were observed. On the other hand, few landslides appear to have been triggered.

Figures 6. Cracks in road pavements: near Onna (left) and Paganica (centre and right).







Figure 7. Soil fissures close to the bank of Aterno river near Onna





Figure 8. Rockfall at Caves of Stiffe: last impact mark prior to impacting the building (left); the rock fall impact against the building wall (above)

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Case History (continued)

Some aspects of the M6.3 April 6 2009, L'Aquila, Italy, earthquake

An interesting case of ground failure was observed at Lake Sinizzo, near the small town of San Demetrio ne' Vestini, SE of the city of L'Aquila. Almost 80% of the perimeter of the lake collapsed towards the water, exhibiting large sliding and rotational movements (Fig. 10). The lake behaved essentially as a "sink-hole", being situated in a Karstic natural depression. Bathymetric and Lidar measurements are currently in progress to document and monitor the evolution of the phenomenon. Note in this regard that near-surface soil is cohesive and that no sand ejecta were observed.

Only minor liquefaction effects were triggered by the earthquake, none of which caused damage. Retaining walls behaved well, although some failures were observed on unreinforced RC walls. Finally, no damage was observed in 4 water-retaining dams around L'Aquila.



Figure 9. Rockfall at Fossa: the rock fell from the hill on the right, crossed the garage and stopped across the street.



Figure 10. Lake Sinizzo near San Demetrio ne' Vestini. Ground cracks and large displacements along the eastern perimeter (above, left), northwestern perimeter (above, right) and western perimeter (below, left). Submerged trees along the western perimeter (below, right)

References

[1] Stewart, J.P. (Ed.), Di Capua, G., Kayen, R.E., Scott Kieffer, D., Button, E., Biscontin, G., Scasserra, G., Lanzo, G., Tommasi, P., Pagliaroli, A., Silvestri, F., d'Onofrio, A., Simonelli, A.L., Puglia, R., Mylonakis, G., Athanasopoulos, G., Vlahakis, V. - GEER Association Report No. GEER-016, (Version 1. May 6, 2009), "Preliminary Report on the Seismological and Geotechnical Aspects of the April 6 2009 L'Aquila Earthquake in Central Italy", *www.geerassociation.org*.

[2] Simonelli, A.L., Sica, S., Moccia, F., Penna, A., Lucadamo, C., Mitrione A., Mosca, P., Moscato, T., Rotella, M., Spatola, M.G., Zarra, S. (2009) "Rapporto preliminare sugli effetti indotti sull'ambiente fisico dalla sequenza sismica dell'aquilano - Ver. 1.5", Working group AGI-ReLUIS, <u>www.reluis.it</u>.

News

International Scientific Practical Conference dedicated to the 45th Anniversary of the Tselinograd Civil Engineering Institute "Modern Architecture, Construction and Transport: Situation and Perspectives of Development"

On the 12-13 of May 2009 in Astana, Republic of Kazakhstan, the International Scientific Practical Conference "Modern Architecture, Construction and Transport: Situation and Perspectives of Development" was held. The Conference was dedicated to the 45th Anniversary of the Tselinograd Civil Engineering Institute (The L.N. Gumilyov Eurasian National University, Astana, Kazakhstan). More than 100 geotechnical engineers from 10 countries took part in this Conference. The Volume of Proceedings included 114 papers (total 413 pages).





Trading-entertaining complex «Khan Shatyr» (Astana, Kazakhstan)



At the plenary session of the Conference we heard 4 keynote lectures.

The first keynote lecture was presented by Professor Jean-Louis Briaud, President of the Geotechnical Institute of ASCE, Holder of the Buchanan Chair Zachry Department of Civil Engineering (Texas A&M University, Texas, USA). The his lecture was about the overview of the San Jacinto monument case history.

Professor R.B. Baimakhan's keynote lecture (Kazakhstan State Women Pedagogical University, Almaty, Kazakhstan) was about algorithms of application of Coulomb-Amonton's law.

Professor R.A. Usmanov (Tajikistan Technical University, Tajikistan, President of Tajikistan Geotechnical Society, Tajikistan) presented keynote lecture about situation, problems and progressing of construction of buildings on soft soil conditions of Tajikistan. Professor A.Z. Hasanov (President of Uzbekistan Geotechnical Society, Uzbekistan) was give keynote lecture about an experience of reinforcing of the soil by using modern technologies.

There were 4 sessions in the Conference.

- Session 1 "Architecture and Design, related with geotechnical issues". The session's Chairman was Professor S.I. Rustambekov (Orta, Ltd., Kazakhstan). Co-chairman was Professor R.U. Chekayeva (Eurasian National University, Kazakhstan). During this session 6 reports ware presented.

- Session 2 "Civil Engineering, related with geotechnical Engineering". The session's Chairman was Professor A.S. Zhakulin (Karaganda State Technical University, Kazakhstan). Co-chairman was Dr. Zh.A. Nazarova (Eurasian National University, Kazakhstan). During this session 13 reports ware presented.

- Session 3 "Transportation Engineering, related with geotechnical issues". The session's Chairman was Professor S.N. Nurakov (Eurasian National University, Astana, Kazakhstan). Co-chairman was Professor T.N. Bekenov (Eurasian National University, Astana, Kazakhstan). During this session 5 reports ware presented.

- At 13 May was be Session 4 TC 41 of ISSMGE "Geotechnical Infrastructure of Megacities and New Capitals" (photo Ne4). The session's Chairman was Professor A.Zh. Zhusupbekov (Eurasian National University, Kazakhstan). Co-chairman was Dr. Zh.A. Nazarova (Eurasian National University, Kazakhstan).

During the Conference for all participants there was technical excursion afternoon at 13 May 2009 to the construction site:

- 1. «Universal cinema-concert hall on 3500 seats in Astana» (General Contractor «Mabetex», Switzerland)
- 2. «International Cycle track in Astana» (General Contractor «Mabetex», Switzerland)
- 3. International Entertainment Palace «Khan Shatyr» (General Contractor «Sembol Insaat», Turkey, Head architect of the object -Mr. Foster Norman, England)

Reported by Prof. Askar Zhusupbekov, email: Astana-geostroi@mail.rnu

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News

IS-Kyoto 2009: International Symposium on Prediction and Simulation Methods for Geohazard Mitigation

IS-Kyoto2009 was held at the Kyoto International Conference Center from May 25 to 27 under the organization of TC34 of the ISSMGE on 'Prediction and Simulation Methods in Geomechanics' under auspices of the JGS, the JGS Kansai Branch and the Commemorative Organization for the Japan World Exhibition '70. 202 participants from 19 countries attended the Symposium.



Prof. Oka at the opening ceremony

76 papers were presented and discussed during the technical sessions under the following topics:

- 1) Mechanisms of geohazards, namely, heavy rains, floods, typhoons, earthquakes, landslides, slope and snow slides, tsunamis, land subsidence, coastal erosion, etc.
- 2) Numerical and analytical simulation methods for geohazards, including conventional and advanced methods, FDM, FEM, Extended FEM, DEM, SPH and MPM.
- 3) Advanced constitutive modeling of geomaterials and numerical implementations and constitutive parameter determination using laboratory and field test results.
- 4) Thermo-hydro-mechanical instabilities, namely, large deformations, strain localization, progressive failure, liquefaction, ground water flow analysis, the rapid flow of complex geofluids such as mud flow, etc.
- 5) Monitoring and non-destructive investigation methods for geostructures during floods, earthquakes, heavy rains, etc. and design methods.
- 6) Evaluation of existing prediction methods, performance-based design methods aided by advanced numerical modeling, risk analysis and the management of mitigation programs.
- 7) Case records of geohazards and mitigation projects.

Keynote lectures were delivered by Prof. I.G. Vardoulakis from the National Technical University of Athens, Greece on "Thermo-poro mechanical analysis of catastrophic landslides", Prof. K.T. Chau from the Hong Kong Polytechnic University, Hong Kong on "Some geohazards associated with the 8.0 Wenchuan Earthquake on May 12, 2008", Prof. C.-L. Shieh from the National Cheng Kung University, Taiwan on "Risk assessment for hydraulic design associated with the uncertainty of rainfall", and Prof. H. Nakagawa from Kyoto University, Japan on "Recent flood disasters in Japan".



Delegates of IS-Kyoto2009

Proceedings of the conference have been published by CRC Press (ISBN 978-0-415-80482-0)

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News

International Seminar of ISSMGE - Maputo, 30 July 2009

On the occasion of the first meeting of the Advisory Committee for the 15th African Regional Conference to be held in Mozambique in 2011, ISSMGE and the Mozambican Geotechnical Society (SMG) organized jointly an International Seminar on Geotechnical Engineering. Invited speakers were the members of CAC Prof. Seco e Pinto (Portugal), Prof. Neil Taylor (UK), Prof. Carlos Quadros (Mozambique), Prof. Mounir Bouassida (Tunisia), Prof. Eben Rust (South Africa) and Dr Esve Jacobsz (South Africa). The Seminar took place on July 30, at Hotel VIP in Maputo.

The seminar was a success event. More than 100 participants attended the Seminar where six papers were presented and discussed. Subjects included engineering applications of tropical soils, the use of the piezocone and the centrifuge, retaining structures, soil improvement and geotechnical structures related to underground construction. The audience encompassed practicing geotechnical and civil engineers and university students. The six papers were compiled in a volume of proceedings that was previously distributed to participants

After the seminar, SMG received many positive reactions from participants that were both encouraging and an acknowledgment of the quality of the presentations and discussions.

In the following pictures we can see images taken at the CAC meeting and International seminar.





CAC meeting on july 29th - discussion of arrangements for the African Regional Conference

Obituary



IOANNIS VARDOULAKIS (22.03.1949 - 19.09.2009)

It is with our deepest regret to announce that Ioannis (John) Vardoulakis, Professor of Mechanics at the National Technical University of Athens has passed away. He died in the morning hours of 19th September, aged 60, after suffering serious brain damage caused by an accidental fall some days earlier. John was born in Chania, Crete, in 1949. He received the diploma of Civil Engineer from the National Technical University of Athens (NTUA) in 1972 and was awarded a Ph.D. in Soil Mechanics by the University of Karlsruhe, Germany, in 1977. He served as a research fellow in the University of Karlsruhe and later on moved to the University of Minnesota (USA) where he reached the position of Professor of Geomechanics. In 1990, John was elected Professor of Mechanics at the NTUA.

John's influential research activity covered an impressive variety of subjects associated both with the fields of Geomechanics and that of Engineering Mechanics. His prolific work included contributions to the analysis of stress instability, bifurcation theory, strain concentration, wave propagation, micromechanics, elasticity, plasticity, fracture, thermomechanics and thermoporomechanics. He also provided innovations in the analysis of liquefaction in sands and slope stability. He excelled in the study of stability and mechanical behaviour of ancient monuments, on of them being the landmark study of the Parthenon Marbles. His was a gift to approach subjects both from a theoretical and experimental view, while his ingenuous experimental setups gave him not only international recognition and awards, but also a number of patent licences.

He was honoured with the Bishop Award for Geotechnical Research by the Institution of Civil Engineers in the United Kingdom. He was also awarded with the Medal "Distinguished Research in Geomechanics" by the Japanese Geotechnical Association. He authored of a large number of national and international publications and his research is continuously referenced in the work of other reputed researchers.

John was a strong believer in the fundamental role of pure sciences, especially mathematics, as a tool in research. He has nurtured generations of students and researchers. He set up a world class research team and a state of the art research laboratory in the NTUA with funding from the European Programme IDEAS. He was tireless and a champion of high quality education and career progression based on merit.

He was a highly cultivated individual with an exceptional command of the Greek language and a forceful promoter of his opinions. But above all, he was an exceptional human being.

Information

The unfinished book of Prof. Victor F.B. De Mello on Embankment Dams and Fills as well as his thesis, publications and other technical papers are available on the website: www.victorfbdemello.com.br

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Event Diary

ISSMGE SPONSORED EVENTS

2009

International Symposium on Geoenvironmental Engineering - IGSE 2009 Date: 8 - 10 September 2009 Location: Zhejiang University , Hangzhou, China Language: English Organizer: MOE Key Lab, CISMGE, CCIGS Contact person: Prof. Xiaowu TANG • Address: Institute of Geotechnical Engineering, Anzhong Building B-412, Zhejiang University Hangzhou, 310058 PR China • Phone: 86-571-88208791 • Fax: 86-571-85023966 • E-mail: isge2009@zju.edu.cn

Website: www.ssgeo.zju.edu.cn

4 iYGEC'09 - 4th International Young Geotechnical **Engineers'** Conference

Date: 2 - 6 October 2009 Location: El-Mahrousa Hotel, Alexandria, Egypt Organizer: Egyptian Geotechnical Society • Contact person: Prof. Fatma Baligh (baligh11@hotmail.com) • Address: 5, Ibn Marawan Street, Dokki, Cairo EGYPŤ

- Phone: (+20-2) 3760-7238
- Fax: (+20-2) 3760-7239
- E-mail: iygec2009@hamza.org

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

XXII Geotechnical Engineering Conference of Torino

Date: 18 - 19 November 2009 Location: Politecnico di Torino, Italy

- Organizer: Mario Manassero
- Contact person: ACTA Conferences and Events
- Address: Via Caboto 44
- 10129 Torino
- Italy
- Phone: 39011591871
- Fax: 39011590833
- E-mail: cgttorino@cgttorino.org Website: www.cgttorino.org

International Symposium on Geotechnical Engineering, Ground Improvement, and Geosynthetics for Sustainable Mitigation and Adaptation to Climate Change including Global Warming

Date: 3 - 4 December 2009 Location: AIT, Pathumthani, Thailand Organizer: AIT, IGS, SEAGS, ACSIG Contact person: Prof. Dennes T Bergado, Director/ACSIG • Address: Asian Institute of Technology, PO Box 4, Klong Luang Pathumthani 12120

Thailand • E-mail: bergado@ait.ac.th Website: www.set.ait.ac.th/acsig/conference

2010

2nd International Symposium on CPT, CPT'10

Date: 9 - 11 May 2010

Location: Hyatt Hotel & Resort, Huntington Beach, California, United States

Language: English Organizer: TC 16 ISSMGE

- Contact person: Dr Peter Robertson
- Address: 2726 Walnut Avenue
 - 90755 Signal Hill California
 - **United States**
- Phone: 562-427-6899
- E-mail: probertson@greggdrilling.com
- Website: www.cpt10.com

17th Southeast Asian Geotechnical Conference

Date: 10-13 May 2010 Location: Taipei Int'l Convention Center (TICC), Taipei, Taiwan Organizer: SEAGS, TGS • Contact person: Prof. Der-Wen Chang, Sec. Gen 17SEAGC • Address: Department of Civil Engineering, Tamkang University, Tamsui. Taiwan 25137 • Phone: +886 (2) 2623-4224 • Fax: +886 (2) 2620-9747

- E-mail: dwchang@mail.tku.edu.tw
- Website: http://www.17seagc.tw/welcome.htm

9th International Conference on Geosynthetics

Date: 23 - 27 May 2010 Location: Sofitel Jequitimar Hotel, Guaruja, Brazil Organizer: IGS, ABMS • Contact person: Secretaria do Congresso - (ICG - Brazil 2010)

- Address: Av. Brigadeiro Faria Lima, 1478 sala 314, São Paulo, SP
 - Brazil CEP 01451-001
- Phone: 55 11 3032-3399
- Fax: 55 11 3819-6311
- E-mail: info@9icg-brazil2010.info
- Website: www.9icg-brazil2010.info

DECGE - 14th Danube-European Conference on Geotechnical Engineering

Date: 2 - 4 June 2010 Location: University of Technology, Bratislava, Slovakia Organizer: Slovak group of ISSMGE

- Contact person: GUARANT International spol. s r. o.
- Address: Uhrova 10
 - 831 01 Bratislava Slovak Republic
- Phone: 421 2 54 430 206
- Fax: 421 2 54 430 206
- E-mail: decge2010@guarant.cz
- Website: www.decge2010.sk

Event Diary (continued)

NUMGE2010

Date: 2 - 4 June 2010 Location: Trondheim, Norway Language: English Organizer: NTNU Trondheim • Contact person: Mrs. Astrid Bye • Address: NTNU Videre, Paviljong A, Dragvoll 7491 Trondheim Norway • Phone: 47 73 59 52 54

• E-mail: numge2010@videre.ntnu.no Website: www.ntnu.no/numge2010

7th International Conference on Physical Modelling in

Geotechnics ICPMG 2010 Date: 28 June - 1 July 2010 Location: ETH Zurich, Honggerberg Campus , Zurich, Switzerland Language: English Organizer: ETH Zurich • Contact person: Laios Gabriela • Address: ETH Zurich, Institute for Geotechnical Engineering 8093 Zurich Switzerland

Phone: 41 44 6332525
Fax: 41 44 6331079
E-mail: info@icpmg2010.ch
Website: www.icpmg2010.ch

International Symposium on Geomechanics and

Geotechnics: From Micro to Macro Date: 10 - 12 October 2010 Location: Tongji University , Shanghai, China Organizer: Tongji University • Contact person: Prof. Mingjing Jiang • Address: Dept. of Geotechnical Engineering, Tongji University 200092 Shanghai

China • Phone: 86-21-65980238 • Fax: 86-21-65980238 • E-mail: mingjing.jiang@tongji.edu.cn Website: geotec.tongji.edu.cn/is-shanghai2010/

6th International Congress on Environmental Geotechnics Date: 8 - 12 November 2010 Location: New Delhi, India Language: English Organizer: Indian Geotechnical Society • Contact person: Dr. G. V. Ramana Address: Associate Professor, Department of Civil Engineering Indian Institute of Technology Delhi, Hauz Khas 110016 New Delhi India • Phone: 911126591214 • Fax: 911126581117 • E-mail: 6icegdelhi@gmail.com Website: www.6iceg.org

2011

XIV Asian Regional Conference Soil Mechanics and Geotechnical Engineering Date: 23 - 28 May 2011 Location: Hong Kong, China (Organizer: HKGESM PolyU Secretary: Conference Secretariat • Address: Department of Civil & Structural Engineering The Hong Kong Polytechnic University Kowloon, Hong Kong China (Hong Kong SAR) • Phone: (852) 2766-6008

- Phone: (852) 2766-600
- Fax: (852) 2334-6389

XV African Regional Conference on Soil Mechanics and Geotechnical Engineering (13-16 June) Date: 13 - 16 June 2011 Location: Maputo, Mozambique

Organizer: Soc. Moçambicana de Geotecnia

Fifth International Symposium on Deformation

Characteristics of Geomaterials (IS-Seoul 2011) Date: 31 August - 3 September 2011 Location: Seoul, Korea Contact person: Prof. Dong-Soo Kim • Address: Dept. of Civil & Environmental Eng., KAIST 305-701 Daejeon Korea

- Phone: 82-42-350-3619
- Fax: 82-42-350-3610
- E-mail: dskim@kaist.ac.kr

XV European Conference on Soil Mechanics and Geotechnical Engineering Date: 13 - 19 September 2011 Location: Athens Concert Hall, Athens, Greece Organizer: HSSMGE

XIV Panamerican Conference on Soil Mechanics and Geotechnical Engineering (October) & V PanAmerican Conference on Learning and Teaching of Geotechnical Engineering, & 64th Canadian Geotechnical Conference Date: 2 - 6 October 2011 Location: Sheraton Hotel Toronto, Ontario, Canada Organizer: CGS

11th Australia - New Zealand Conference on Geomechanics Date: To be decided Location: Melbourne, Australia

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Event Diary (continued)

NON-ISSMGE SPONSORED EVENTS

2009

DFI 34th Annual Conference on Deep Foundations

Date: 20 - 23 October 2009 Location: The Westin Crown Center , Kansas City, MO, United States Language: English Organizer: Deep Foundations Inst • Contact person: Theresa Rappaport • Address: 326 Lafayette Avenue 07506 Hawthorne NJ United States • Phone: 1 973-423-4030 • Fax: 1 973-423-4031 • E-mail: staff@dfi.org

Website: www.deepfoundations09.org

International Symposium on Ground Improvement Technologies and Case Histories Date: 9 - 11 December 2009 Location: Singapore Organizer: Geotech Society of Singapore Contact person: c/o Professional Activities Centre • Address: NUS Faculty of Engineering, Blk EA, #05-34, 117576 Singapore • Phone: (65) 65165113 Fam. (E) (674 5007

- Fax: (65) 6874 5097
- E-mail: ISGI09@nus.edu.sg Website: www.geoss.sg/ISGI09

2010

2nd International Conference on Geotechnical Engineering ICGE 2010
Label: Innovative geotechnical Engineering
Date : October 2010
Location : Hammamet, Tunisia
Language: English
Organizer: Geotechnical Engineering Research Unit (URIG)
Contact person: Imen SAID
Phone : (216) 22 14 66 34
E-mail: imen_said@yahoo.fr
Adress : National Engineering School of Tunis , ENIT, BP 37,

Le Belvédère 1002, Tunis Tunisie

Fifth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics Date: 24 - 29 May 2010

Location: Marriott Mission Valley , San Diego, California, United States

- Contact person: Lindsay Bagnall
- Address: Distance and Continuing Education Missouri University of Science and Technology
- Phone: 573-341-4442
- Fax: 573-341-4992

• E-mail: geoeqconf2010@mst.edu

Website: 5geoeqconf2010.mst.edu

Geotechnical Challenges in Megacities

Date: 7 - 10 June 2010 Location: Moscow, Russia Language: English, Russian

Organizer: NIIOSP & GRF

- Contact person: Mikhail Kholmyansky Secretary General
- Address: 2-nd Institutskaya St., 6, build.12 NIIOSP
 109428 Moscow
 Russia
- Phone: 7 499 170 2709, 7 499 170 2767
- Fax: 7 499 170 2767
- E-mail: info@GeoMos2010.ru

Website: www.GeoMos2010.ru/

The 11th Congress of the International Association for Engineering Geology and the Environment. (IAEG2010) date: 5 - 10 September 2010

Location: SkyCity Convention Centre, Auckland, New Zealand Language: English Organizer: Clare Wilton

- Contact person: The Conference Company
- Address: PO Box 90 040
 - 1142 Auckland New Zealand
- Phone: 64 9 360 1240
- Fax: 64 9 360 1242
- E-mail: iaeg2010@tcc.co.nz
- Website: www.iaeg2010.com

2nd International Symposium on Frontiers in Offshore Geotechnics (ISFOG) Date: 8 - 10 November 2010

Date: 8 - 10 November 2010 Location: Perth, Western Australia, Australia Organizer: COFS Secretary: • E-mail: ISFOG2010@civil.uwa.edu.au Website: www.cofs.uwa.edu.au/ISFOG2010/

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Editorial Remarks

The editorial board is pleased to send the ISSMGE members ISSMGE Bulletin Vol.3, Issue 3 in September 2009, which includes the 'Message of the President', 'TC Activity', 'Activity of Member', 'Reminiscences', 'Case History', 'News' and 'Event Diary'. Contributions from member society is very much welcome. Any comments to improve the Bulletin are also welcome. Please contact any member of the editorial board or Vice-President for the region or the Coordinator of the region, or directly by e-mail to Osamu Kusakabe (kusakabe@cv.titech.ac.jp). For comments on this September 2009 issue can also be send to the Chief Editor of this issue and the Coordinator for Africa,Imen SAID (imen_said@yahoo.fr).

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