THE INTERNATIONAL SEMINAR ON CONSTRUCTION ON WEAK ROCKS
29th June – 1st July 2013
Khartoum, Sudan

Dr. Hussein Elarabi – Secretary of SSSMGE

The idea of organizing this seminar was initiated during the 17th ICSMGE2009 in Alexandria by Prof Pedro Pinto. Then, the idea was given the utmost attention by the Geotechnical Department of Building and Road Research Institute, University of Khartoum and the members of SSSMGE for the sake of resurrecting the SSSMGE and spotlights the importance of the society in solving the major geotechnical problems in Sudan among which is the construction on weak rocks. This seminar is intended to improve our understanding on this topic.

The International Seminar on Construction on Weak Rocks took place in the city of Khartoum from July 29th to July 1st. This event was organized under the auspices of the Soil Mechanics and Geotechnical Engineering (SSSMGE) in conjunction with ISSMGE in which Prof. Pedro S. Pinto played major roles. It was intended to resurrect the Sudanese Society and to spotlight the importance of the society in solving the major geotechnical problems in Sudan. This seminar attracted 184 participants. The event was organized and advised by the following committees:

The ORGANIZING COMMITTEE

Chairman: Dr. El Fatih M. Ali, President of SSSMGE, General Manager of Engineering Service and Design, Khartoum, Sudan
Secretary: Dr. Hussein Elarabi, Secretary of SSMGME, Head of Geotechnical Engineering Department, BRRI, University of Khartoum, Sudan.


The ADVISORY COUNCIL

Prof. J.L. Briaud, ISSSMGE President
Prof. Pedro S. Pinto, ISSSMGE Past President
Prof Samuel Ejezie, ISSMGE Vice President for Africa
Prof. Fatma Baligh ISSMGE forthcoming Vice President for Africa

The opening ceremony commenced with recitation of few verses from Holly Quran. Afterwards, a speech was given by President Jean. L. Briaud, followed by Prof. Pedro S. Pinto (ISSMGE Immediate Past President) and Prof. Samuel Ejezie (ISSMGE Vice President for Asia). Then a welcoming speech was given by the President of the Sudanese Society, Dr. Eng. Elfatih Mohamed Ali. Also, a speech was given by the representative of the Governor of State of Khartoum – Minister of Physical Planning and Infrastructure Eng., Alrasheed Osman Fageery. Later, his Excellency the Vice – President of Sudan Dr. Eng. Elhaj Adam Yousif gave his speech, in which he mentioned the vital role of soil mechanics and geotechnical engineering in the construction industry. At the end, a speech was given by Prof. Askar Zhussupbekov and his Excellency the Vice – President of Sudan Dr. Eng. Elhaj Adam Yousif exchanged gifts with the foreign experts and posed with them for group photo.

The invited lectures were delivered as what follows;

1. Prof. Jean-Louis Briaud (President of ISSMGE) “Unsaturated soil behavior for the practicing engineer” and “Shrink – swell soils and the design of foundation for light building”

2. Prof. Pedro S. Pinto (Past President of ISSMGE) “Railway old station building: enlargement and underpinning” and “Lessons learned from two landslide case histories”

3. Prof. Samuel Ejezie (Vice President of ISSMGE for Africa) “Behavior of lateritic soils in engineering construction tropical Africa” and “Vibration transmission in lateritic soils of the tropical region of Africa”

4. Prof. Askar Zhussupbekov ISSMGE Vice President for Asia) “Geotechnical construction on weak rock ground of new capital Astana Kazakhstan” and “Analyses of the settlement of pile foundations under weak rock conditions of Astana”

5. Prof. Antonio Bobet (Purdue University, USA) “Deformation and failure of soft rocks: a model for shales” and “Propagation and coalescence of frictional discontinuities”
6. Prof. Fatima Baligh (ISSMGE forthcoming Vice President for Africa) "Deep vibratory compaction method"

7. Dr. Mohamed A. Osman (Past Director of the Building and Road Research Institute, University of Khartoum, Sudan) “Weak rocks in Sudan origin, distribution and some geotechnical properties”

8. Dr. Ahmed M. Elsharief (Treasurer of SSSMGE, Director of Building and Road Research Institute, University of Khartoum) “Design and construction practices of piers in Nubian Sandstone Formation”

A round-table discussion took place on the second day on “Construction on Weak Rocks – Challenges and solutions.” The third day offered the guests a field visit sponsored by the Dams Implementation Unit (DIU) to the Dam Complex of Upper Atbara and Setit which is currently under construction. All site visitors assembled at Khartoum International Airport where a twin engine Foker plane was ready to departure. The plane took off from Khartoum with 50 Passengers on board at 7:00am and the flight took about 50 minutes to reach Alshowak airstrip. Many presentations were given to the visitors at site. These followed by a visit to all ongoing construction activities in the site. The visit lasted for three hours where the participants expressed great pleasure and joy to witness a project with such magnitude.

Photographs taken during the conference are presented below.