

## **International Workshop “Geotechnical and structural problems associated with the protection of historical monuments and unique constructions”**

An International Workshop «Geotechnical and Structural Problems associated with the Protection of Historical Monuments and Unique Constructions» was held on December 12-13, 2016, at the L.N. Gumilyov Eurasian National University, Astana, Kazakhstan. The workshop was dedicated to the 75<sup>th</sup> Anniversary of distinguished Dr.Eng. in Geotechnical Engineering, Professor Yoshinori Iwasaki, Chairman of ATC-19, the Director of Geo Research Institute (Osaka, Japan). This Event was jointly organized by the Kazakhstan Geotechnical Society, the ATC-19, TC-305 of the ISSMGE, and the Geotechnical Institute of L.N. Gumilyov Eurasian National University.

Geotechnical Experts from Japan, South Korea, Poland, Singapore, Syria, Taiwan, USA, Estonia, Russia, Romania and Kazakhstan participated in this workshop. Also Representatives from the leading organizations of the construction industry of Kazakhstan, the leading scientists in the field of geotechnical and earthquake engineering, University’s academic staff, PhD and Master Students and Members of Kazakhstan Geotechnical Society were invited to attend the workshop.



*Figure 1. A plenary session of the International Workshop*

The Vice-Rector for social and cultural development of L.N. Gumilyov Eurasian National University Prof. Dikhan Kamzabekuly delivered a welcome speech and congratulated Prof. Yoshinori Iwasaki with his 75<sup>th</sup> Anniversary and made a point his contribution and achievements in the professional field. The Vice-Rector called that this event is very important and significant for L.N. Gumilyov Eurasian National University, as a part of the general celebration of the 25<sup>th</sup> Anniversary of Independence of the Republic of Kazakhstan and also the 20<sup>th</sup> Anniversary of L.N. Gumilyov Eurasian National University.



*Figure 2. Awarding Ceremony of Prof. Yoshinori Iwasaki*

In conclusion of the speech according to the decision of the Rector and Academic Council Eurasian National University a Prof. Dikhan Kamzabekuly presented Prof. Yoshinori Iwasaki the prestigious Award of L.N. Gumilyov Eurasian National University “The Kultegin Medal,” which is the symbol of the imperishability of his or her creativity.

The Head of the Department of Design of Building and Structures of L.N. Gumilyov Eurasian National University, the President of Kazakhstan Geotechnical Society, Prof. Askar Zhussupbekov told about the enduring friendship with Prof. Yoshinori Iwasaki. He introduced that Prof. Yoshinori Iwasaki is a visiting Professor of L.N. Gumilyov Eurasian National University since 2005 and has been a scientific consultant of Master and Doctoral Students in Civil Engineering of L.N. Gumilyov Eurasian National University.

Prof. Zhussupbekov also told about the participation of Prof. Yoshinori Iwasaki as a member the delegation of scientific group from L.N. Gumilyov Eurasian National University in South Kazakhstan for a study of historical monuments and mausoleums Khoja Ahmed Yassai and Arystan-Bab. These advices and guidance of Prof. Yoshinori Iwasaki became useful guidelines for the development of the Master Plan of the Astana city and at the Mega project of Highway “Western Europe - Western China” which is implemented on the territory of Kazakhstan.



*Figure 3. Co-chairs of a plenary session the International Workshop: Vice-Rector for social and cultural development Prof. Dikhan Kamzabekuly and Chairman of ATC-19, Dr.Eng., Prof. Yoshinori Iwasaki*

Congratulations to Prof. Yoshinori Iwasaki were expressed by the President of JARUS, Prof. Tadatsugu Tanaka and the Chair of Geotechnical Division of Syrian Geotechnical Society, Prof. Talal Awwad and also by other guests.



*Figure 4. Group photo of participants of the International Workshop*

During the workshop, special and keynote lectures were delivered. Prof. Yoshinori Iwasaki presented an invited lecture on the characteristics of damage of stone masonry retaining wall of Kumamoto Castle by Earthquakes of April 2016. Dr.Akitoshi Mochizuki, Prof. Emeritus of

Tokushima Univ. (Japan) told on the theme of soil mechanics and science. A special lecture of Prof. Zbigniew Lechowicz (Warsaw University of Life Sciences, Poland) is “Evaluation of undrained shear strength of cohesive soils in a hollow cylinder apparatus”. Professor Eun Chul Shin of Incheon National University presented also a special lecture “Reconstruction of Nepal Earthquake Damaged Facilities–Drinking water supply line system”, Prof. Tadatsugu Tanaka from Tokyo University gave a keynote lecture “Elasto-plastic dynamic response analysis of fill-type dams taking into account strain softening with shear banding”. Prof. Der-Wen Chang from Tamkang University (Taiwan) presented a special lecture “Pile foundation design in Taiwan – current practice and perspective” and Professor Hoe I. Ling of Columbia University (USA) told on a Simple Approach to Seismic Performance of Earth Structures as a keynote lecturer. From Far Eastern State Transport University (Khabarovsk, Russia) Prof. Sergey Kudryavtsev presented a keynote lecture “Thermophysical calculations embankments of railways in permafrost area in Russian” and Prof. Leung Chul Fai (University of Singapore) with topic “Pile foundations in offshore construction sites”. Keynote lectures were also presented representatives of Kazakhstan Geotechnical Society by Dr. Tursyn Zhunissov from the L.N. Gumilyov Eurasian National University on a topic “Geotechnical and constructive features of historical and cultural monuments of Kazakhstan”, by President KazDorNII, Prof. Bagdat Teltayev about Road pavements with stabilized soil layers, Prof. Mait Mets (Tallin University, Estonia) about soil-structures interaction on soft ground of Parnu (Estonia) and Prof. Ludmila Bejenaru from University of «Al.I.Cuza» (Iasi, Romania) about geotechnical infrastructures of Mega-Projects in Romania as well. During workshop all participants discussed problems in Geotechnical Engineering in Kazakhstan and their countries and shared a valuable experience in this field. In the following day of the workshop, a technical tour was arranged to construction site of new mosque in left coast of Ishim River in Astana.



*Figure 5. Group photo of Keynote lecturers and engineers of KGS, Ltd. in technical tour of the International Workshop (temperature of weather is  $-20^{\circ}\text{C}$ ), from left to right: Prof. Hoe I. Ling (Columbia University, New York, USA), Site Engineer Ramazan Sadmanov (KGS, Ltd., Astana, Kazakhstan), Prof. Akitoshi Mochizuki ( University of Tokushima, Tokyo, Japan), Prof. Yoshinori Iwasaki (Geo-Research Institute, Osaka, Japan), Prof. Askar Zhussupbekov (Eurasian National University, Astana, Kazakhstan), Manager of construction site, Dr.Ivan Morev (KGS, Ltd., Astana, Kazakhstan)*

In the evening of the workshop, the participants were invited to a Gala Dinner with several national toasts (Banzai, Combai, URA, ALGA, and others) which were dedicated for strong healthy, prosperity and happiness of great Professor Iwasaki Sensei. Prof. Askar Zhussupbekov also introduced participants congratulation messages for 75 Year Celebration of Birthday of Prof. Yoshinori Iwasaki from Prof. Jean-Louis Briaud –President of FedGS, the Immediate Past President of ISSMGE, Prof. Neil Taylor –General Secretary of ISSMGE, Prof. Ikuo Towhata – the Vice President of ISSMGE for Asia and other colleagues from Russia, USA, Japan, Ukraine, and other countries.



*Figure 6. The 75<sup>th</sup> Anniversary cake for Professor Yoshinori Iwasaki*

Foreign participants – VIP Professors also stayed in Astana, Kazakhstan, about two weeks. They gave several short courses on the Geotechnical and Civil Engineering for Master and Doctoral Students of L.N. Gumilyov Eurasian National University.