



RECENT DEVELOPMENT OF GEOTECHNICAL AND GEO-ENVIRONMENTAL ENGINEERING IN ASIA

Edited by

Maotian Luan, Kouki Zen,
Guangqi Chen, Tingkai Nian,
Kiyonobu Kasama



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Preface

The engineering properties of various local soils and rational evaluation and design method of different earth structures and foundations as well as the practical techniques for soil improvement or reinforcement are not only generally common issues in the geotechnical community in the world, but also especially unceasing topics to be deeply investigated in Asian area. Large-scale infrastructural facilities and engineering structures in the developing countries are built on soft grounds or problematic soils, and also geo-environmental problems are being attained much concern in both developing and developed countries in Asia. However, engineering behavior of naturally deposited geo-materials in different locations and the practical performance of earth structures and foundations have not been well understood. Both academic and technical aspects in the geotechnical and geo-environmental fields are essential and fundamental to successful and rational engineering designs. The exchange of information of new idea, new method, new technology and new material between scientists and practitioners among different countries are critically necessary through international symposia or joint forums.

Due to its geographical proximity to the Asian continent, Kyushu District, Japan, has enjoyed a long history as a gateway for Asian culture into Japan. Today, many cities and towns in Kyushu Island continue to strengthen and consolidate their traditional ties with Asian countries through economic, cultural, educational and academic exchanges and through many varieties of international activities. In order to promote the international exchange of information on the current research and technology in the field of geotechnical engineering and geo-environmental engineering, Kyushu Branch of Japanese Geotechnical Society (KBJGS) has successfully organized a series of joint symposia together with other Asian countries and areas. In the past decade, the 1st joint symposium was successfully held at Shanghai in 1997, the 2nd at Hong Kong in 1999 and the 3rd at Hanoi in 2004.

Now, the 4th Asian Joint Symposium on Geotechnical and Geo-Environmental Engineering (JS-Dalian 2006) is to be held on Nov.23-25 at Dalian University of Technology, Dalian, China. The idea to organize such a joint symposium was initiated by Prof. Kouki Zen and Dr. Guangqi Chen of Kyushu University, Japan and Prof. Maotian Luan of Dalian University of Technology, China in September, 2004 and it was primarily shaped in May, 2006. The joint symposium was approved by the related special societies in both sides of Japan and China. Advisory committee and technical committee together with organization committee were then established. The symposium is to be jointly hosted by the State Key Laboratory and the School of Civil and Hydraulic Engineering, Dalian University of Technology, Dalian, China and Kyushu Branch of Japanese Geotechnical Society, Fukuoka, Japan.

Based on the background stated above, the main purposes of the symposium were determined as followings: (1) to enhance the skills of engineers or researchers of North Eastern Asia in the field of geotechnical engineering and to exchange the mutual understanding of the research and practice

among the Asian countries, (2) to have informal discussion under the umbrella of "symposium" warmly, in which the discussion involving all the participants is highly expected, (3) to extend the exchange of the information to the practice and research to the whole Asian region, and (4) to offer a platform of international corporation for private business sector in the field of geotechnical engineering in the countries of North Eastern Asia.

The symposium covers four keynote lectures and seven technical sessions for oral presentations. The keynote lectures are given by the invited scholars from Japan, South Korea and China. The papers from Japan, China and Singapore will be registered in the proceedings after critical review. The symposium will focus on such seven aspects as (1) soil characteristics, (2) shallow and deep foundation as well as retaining earth structures, (3) slope stability, (4) geo-environment, (5) geo-disaster, (6) soil improvement and earth reinforcement, and (7) general problems and others. The valuable contributions from the authors and reviewers are appreciated.

The Chairman and Co-Chairmen of the organization committee of the symposium would like to express their appreciation to Dr. Tingkai Nian of Dalian University of Technology, China, and Dr. Kiyonobu Kasama of Kyushu University, Japan, the general secretaries of the symposium, who have unstintingly shared their time in preparing the symposium. Also they would like to take this opportunity to express their gratitude to Mr. Ke Wu, Mr. Xiyuan Sun, Miss Zhiyun Wang, Miss Dongxue Hao, Miss Dan Jin and Miss Xiaojing Feng for their serious and hard working in assisting to accomplish the edition of the Proceeding in time. Special thanks are given to Dr. Guangqi Chen of Kyushu University and Prof. Jun Otani of Kumamoto University for their continuing assistance and supports during organization of the joint symposium.

Both the cooperation from three Committees and the supports from the societies and hosts are all grateful. The financial supports from the National Natural Science Foundation of China, the State Key Laboratory and the School of Civil and Hydraulic Engineering, Dalian University of Technology are gratefully acknowledged.

We now are looking forward to a successful and fruitful joint Symposium in Dalian during Nov.23-25, 2006.

Kouki Zen(Chairman) and Maotian Luan (Co-Chairman)
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