

Preface

Geotechnical Hazards from Large Earthquakes and Heavy Rainfalls is a compilation of peer-reviewed papers presented in the sixth Japan–Taiwan Joint International Workshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfalls. The workshop was held under the auspices of the Asian Technical Committee No. 3 on Geotechnology for Natural Hazards (ATC3) of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE). It was co-organized by the Japanese Geotechnical Society (JGS) and the Taiwanese Geotechnical Society (TGS).

ATC3 was established in 1993 under the leadership of its founding chairman, Prof. K. Ishihara, Professor Emeritus of the University of Tokyo, Japan, to deal with the geotechnical aspects concerning earthquake-triggered and rainfall-induced natural hazards in the Asian region. Since its inception, ATC3 has always been very active in organizing academic events and research activities between Japan and Taiwan. Towards this end, five workshops were successfully held between 2004 and 2012 both in Japan and Taiwan. The aim of this sixth workshop was to exchange information related to geotechnical natural hazards and establish a joint research framework for future collaboration between Japan and Taiwan as well as other Asian countries.

The workshop was financially supported by Kita-Kyushu City, the Kita-Kyushu City Convention Association, and the Japanese Geotechnical Society. The editors are very grateful to these three organizations for their encouragement and support of the workshop and the publication of this book.

The book focuses on geotechnical and natural hazards-related issues in the Asian region such as earthquakes, tsunami, and rainfall-induced debris flows, slope failures, landslides, and so on. It contains the latest information and mitigation technology on earthquake and rainfall-induced geotechnical natural hazards. The volume comprises 57 contributions including three keynote and special lectures that were delivered during the workshop by distinguished scholars and experts in this field. All the manuscripts were thoroughly reviewed by at least two reviewers

selected from an international panel of experts in order to check for the relevance to the theme as well as the quality of technical contents and presentation.

The publication of this volume has been possible through the sustained efforts of the staff of the Geotechnical Engineering Research Group of the Department of Civil Engineering, Kyushu University. The editors express their sincere thanks to all the members. Special thanks go to Mr. Babloo Chaudhary, a Ph.D. student in the Geotechnical Engineering Research Group of Kyushu University, for his tireless efforts and dedication, which were instrumental in the timely publication of the book. The editors also would like to express their sincere gratitude to all the reviewers for their time and effort to review the manuscripts.

Geotechnical Hazards from Large Earthquakes and Heavy Rainfalls provides a wealth of knowledge and information, and helps disseminate the latest information and technology in the field of geotechnical natural hazards. The book is aimed at researchers, designers, consultants, government officials, academicians, and students working in those fields. The editors hope that in the years to come, the developments, the state of the art, the knowledge, and findings that have been compiled in this book will contribute towards the development of a new chapter in disaster prevention and mitigation of geotechnical structures not only in the Asian region, but also in the other regions of the world.

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