4th Japan-Korea Geotechnical Engineering Workshop

Geotechnics for Human Security

July 6-7, Kobe, Japan

Japanese Geotechnical Society and Korean Geotechnical Society

Program Overview (tentative)

July 5 Tuesday

19:00 – 21:00   **Welcome Reception**

at Chinese Restaurant "Shukei-en," 29F, Kobe Portpia Hotel (http://www.portopia.co.jp/en/location/)

July 6 Wednesday

9:00 – 9:15   **Opening**

9:15 – 10:15   **Session A**

10:30 – 12:00   **Session B**

13:00 – 15:00   **Session C**

15:15 – 17:30   **Session D**

at Room 401, Kobe International Conference Center (http://kobe-cc.jp/english/)

18:00 – 20:00   **Reception of JGS Annual Conference**

at Room "Kairaku," B1F, Kobe Portpia Hotel (http://www.portopia.co.jp/en/location/)

July 7 Thursday

8:15 – 18:00   **Technical Visit**

Technical Program on July 6 Wednesday (tentative)
(Room 401, Kobe International Conference Center)

Fifteen (15) minutes will be allocated to each presentation including discussion.

9:00 – 9:15   Opening

Greetings by representatives from JGS, KGS, and the Organizing Committee

9:15 – 10:15   Session A - Earthquake and dynamic issues

Chairperson: Dr Yoichi Watabe

Some case histories of liquefaction and slope instability caused by the 2011 off the Pacific coast of Tohoku Earthquake
Junichi Koseki, Yukika Miyashita, Jianliang Deng and Hiroyuki Araki

Seismic behaviors of rockfill dams through centrifuge modelling
Dongsoo Kim, Mukwang Kim, Seihyun Lee and Yunwook Choo

Backfill compaction control based on laboratory stress-strain tests
Fumio Tatsuoka

Dynamic *p-y* curves for dry sand by dynamic centrifuge tests
Mintaek Yoo, Jintae Han, Jungin Choi and Myoungmo Kim

10:30 – 12:00   Session B - Ground characterization, modification, and bearing capacity

Chairperson: Prof. Eunchul Shin

Development of new asymmetric anchor plate to mitigate smear effect induced by PVD installation via centrifuge model tests
Yunwook Choo, Jaehyun Kim, Hyunil Park and Dongsoo Kim

Failure of sands due to water-inflow and soil-drainage cycle with different inflow rate through a defective underground pipe
Toshifumi Mukunoki, Naoko Kumano and Jun Otani

Behavior of monopile foundations under static and cyclic loads
Yongmin Kim, Sangseom Jeong and Youngho Kim

Bearing capacity of strip footing over a circular underground openings in cohesive-frictional soil
Kentaro Yamamoto, Andrei V. Lyamin, Daniel W. Wilson, Andrew J. Abbo and Scott W. Sloan

Effect of biomineralization on strength of cemented sand
Sung-Sik Park

Application of geostatistical method for liquefaction potential mapping
Rama Mohan Pokhrel, Jiro Kuwano and Shinya Tachibana

12:00 – 13:00   Lunch (at Casteria 5F, Quality Hotel Kobe)

13:00 – 15:00   Session C - Soil and rock fills, slopes, and excavations

Chairperson: Prof. Sangseom Jeong

Combined monitoring of water content and displacement for slope instability
Taro Uchimura, Daiken Suzuki and Seo Hongkwan

Numerical investigation on effect of internal drainage on performance of reinforced earth wall during rainfall
Chungsik Yoo and Hoon-min Jeon

Comparison between splitting tensile strength test and uniaxial tensile test on Tage stone
Yasuhisa Aono, Kazuo Tani and Tetsuji Okada

A case study of long-term settlement estimation of dynamic compacted high rock embankment with construction path
Kyungtae Bae, Taehoon Kim, Hyungsuk Kim, Jaeyeol Kim, Kangkyu Kim and Woojin Lee

Statistical analysis of strength properties by rock shear tests based on rock mass classification systems of JGS
Yota Togashi and Kazuo Tani

New shallow tunnel construction method in soil by using continuous pile wall
Jaeseung Lim, Jaeho Choi, Dongin Park, Hyun Cho and Kihwan Lee

Centrifuge testing of reinforcement method for embankments on liquefiable ground
Makiko Misumi, Tadafumi Fujiwara, Akira Tateishi and Tomoyuki Aoki

Risk evaluation and reliability-based design of earth-fill dams for overflow due to heavy rains
Shin-ichi Nishimura and Shunsuke Mori

15:15 – 17:30   Session D - Environmental issues

Chairperson: Prof. Junichi Koseki

2-D axi-symmetric non-linear finite strain consolidation model considering self-weight consolidation of dredged soil
Hangseok Choi, Taehoon Kwak, Dongseop Lee and Jeehee Lim

Environmental influence in low-landfilling using waste soil from construction site
Eunchul Shin, Jeongku Kang and Youngjin Park

Measurement of swelling pressure using relative humidity controlling system for compacted bentonite
Tomoyoshi Nishimura and Junichi Koseki

The history of costal reclamation in Incheon
Khi woong Kim, Eun chul Shin and Yong ha Kim

Engineering properties of the mixture of steel slag with fine-grained soil in use for fill material
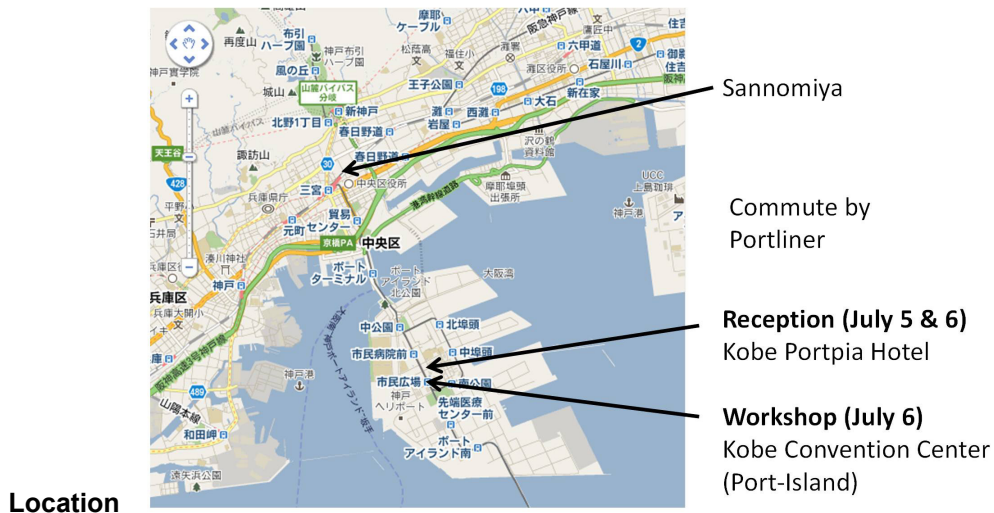*Jinsuk Hur, Jemin Baek, Minsu Jung and Satoru Shibuya*

In-situ investigation of geo-environment in arid land which licorice grows wildly and a consideration for added value greening
Zentaro Furukawa, Kiyoshi Omine, Noriyuki Yasufuku, Taizo Kobayashi, Haruka Kiyotomo and

Atsushi Shinkai

Influence of magnitudes of negative dewatering pressures on the dewatering behavior of dredged slurry
Jun Tong, Noriyuki Yasufuku, Kiyoshi Omine and Taizo Kobayashi

Experimental study on hydraulic resistance of sea ground considering direction change of the tidal current
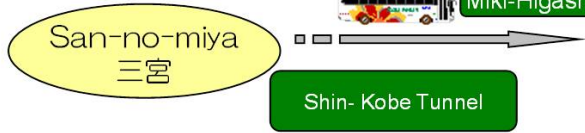*Young Sang Kim and Kyoungo Kang*

Sedimentary stratigraphy of intertidal flats: Sandflats, mudflats, and subtropical intertidal flats
Yoichi Watabe, Shinji Sassa and Soonbo Yang

17:30 -   Closing

Sannomiya

Commute by Portliner

Reception (July 5 & 6)
Kobe Portpia Hotel

Workshop (July 6)
Kobe Convention Center (Port-Island)

Location

Technical Visit on July 7 Thursday

(Tentative schedule)

Start at 8:15

San-no-miya
三宮

Miki-Higashi IC

Shin- Kobe Tunnel

9:15 – 11:00

Miki Sougou Bousai Park
Regional Park with emergency function during disaster.

E-Defense
Hyogo Earthquake Engineering Research Center
http://www.bosai.go.jp/hyogo/ehyogo/index.html

3-D Full-Scale Earthquake Testing Facility, nicknamed "E-Defense"

北淡IC

12:00 – 13:00

Hokudan Earthquake memorial park

You can observe Nojima fault whitch appeared by the Great Hanshi earthquake.

Nojima Fault preservation center

Wall of Kobe

淡路IC 13:15 – 15:00

Akashi Kaikyo Bridge
The longest suspension bridge in the world
Its length is 3,911m
You can visit anchorage, walk on grid deck and climb up to the tower top

San-no-miya

18:00

Kansai Airport