

Program Overview

Date and time written in this program are represented in Japan Standard Time.

Keynote lecture: 45 minutes (40 minutes for presentation + 5 minutes for discussion)

General presentation: 20 minutes (15 minutes for presentation + 5 minutes for discussion)

Friday, 18 March, 2022

13:00~13:30	Opening Ceremony
13:30~14:15	Keynote Lecture 1: Prof. Osamu KUSAKABE
14:15~15:00	Keynote Lecture 2: Prof. Toshinori SAKAI
15:00~15:10	Break time
15:10~16:50	Presentations (Session 1, Session 2, Session 3, Session 4)
16:50~17:10	Break time
17:10~18:50	Presentations (Session 5, Session 6, Session 7)
18:50~19:00	Break time
19:00~19:45	Keynote Lecture 3: Prof. Yu HUANG
19:45~20:30	Keynote Lecture 4: Prof. Jin SUN

Saturday, 19 March, 2022

9:00~9:45	Keynote Lecture 5: Prof. Marcio Muniz de FARIAS
9:45~10:30	Keynote Lecture 6: Prof. Jinyuan LIU
10:30~10:40	Break time
10:40~12:20	Presentations (Session 8, Session 9, Session 10)
12:20~13:10	Lunch break time
13:10~14:50	Presentations (Session 11, Session 12, Session 13)
14:50~15:00	Break time
15:00~15:45	Keynote Lecture 7: Prof. Fawu WANG
15:45~16:30	Special lecture: Prof. Atsushi YASHIMA
16:30~17:00	Closing Remarks

Friday, 18 March, 2022

Breakout [Room1]

15:10~16:50 Session 1

Chairman: Yoshihisa MIYATA *National Defense Academy of Japan*

15:10~15:30 <u>No.1-1</u>	<p>Evaluation of the compaction effects on the seismic stability of earth-fill dam - a case history -</p> <p><u>Antoine Duttine</u> <i>Integrated Geotechnology Institute, Ltd.</i></p> <p>Fumio Tatsuoka, Tadatsugu Tanaka, Yoshiyuki Mohri, Tohru Miura, Shinichi Okubo, Shumi Senzaki, Tomoyoshi Takano</p>
15:30~15:50 <u>No.1-2</u>	<p>Dynamic reliability analysis of three-dimensional slopes considering the spatial variability of soil parameters</p> <p><u>Yichuan Li</u> <i>Dalian University of Technology</i></p> <p>Rui Pang, Bin Xu</p>
15:50~16:10 <u>No.1-3</u>	<p>Simulation of the submarine landslide tsunami in 2018 in Palu Bay, Indonesia, using an MPM-FEM hybrid method</p> <p><u>Shaoyuan Pan</u> <i>Tohoku University</i></p> <p>Somphong Chatuphorn, Anawat Suppasri, Shuji Moriguchi, Kenjiro Terada</p>
16:10~16:30 <u>No.1-4</u>	<p>CFD-DEM coupling analysis of the development and load-transfer of coarse sand arch within piled coastal slope protection</p> <p><u>He Sun</u> <i>Tiajin University</i></p> <p>Fengxi Zhou, Qiang Ma, Guoyao Gao</p>
16:30~16:50 <u>No.1-5</u>	<p>Failure Analysis of Unsaturated Soil using MPM with Fractional Step Method</p> <p><u>Soma Hidano</u> <i>Tohoku University</i></p> <p>Yuya Yamaguchi, Shinsuke Takase, Shuji Moriguchi, Kenji Kaneko, Kenjiro Terada</p>

Friday, 18 March, 2022

Breakout [Room2]

15:10~16:50 Session 2

Chairman: Takashi HARA *University of Toyama*

15:10~15:30 <u>No.2-1</u>	<p>Experimental and numerical study on reinforcement effects of plate anchors or flip anchors on model slopes</p> <p><u>Shota Yoshida</u> <i>Daisho Co., Ltd.</i> Xi Xiong, Tatsunori Matsumoto</p>
15:30~15:50 <u>No.2-2</u>	<p>Reinforcement insertion work with a circular pile to prevent slope failure</p> <p><u>Kakuta Fujiwara</u> <i>Tokai University</i> Enayat Mallyar</p>
15:50~16:10 <u>No.2-3</u>	<p>Pore water pressure model for carbonate fault materials based on cyclic triaxial tests</p> <p style="text-align: center;">"This presentation was cancelled"</p> <p><u>Ling Zhu</u> <i>Chengdu University of Technology</i> Xiangjun Pei, Luguang Luo, Yufei Liang, Hui Wang</p>
16:10~16:30 <u>No.2-4</u>	<p>Seepage hammer effect and it impacts on slope stability</p> <p><u>Wei-Lin Lee</u> <i>National Science and Technology Center for Disaster Reduction</i> Chih-Wei Lu, Chjeng-Lun Shieh, Yih-Chin Tai</p>
16:30~16:50 <u>No.2-5</u>	<p>Seismic Behavior of Multi-tiered Reinforced Soil Retaining Wall</p> <p><u>Qiangqiang Huang</u> <i>Tongji University</i> Feifan Ren, Guan Wang</p>

Friday, 18 March, 2022

Breakout [Room3]

15:10~16:50 Session 3

Chairman: Kenji WATANABE *The university of Tokyo*

15:10~15:30 <u>No.3-1</u>	<p>Understanding mechanical behaviors of chaotic soil/rock mixtures from granular shear jamming</p> <p><u>Hu Zheng</u> <i>Tongji University</i></p> <p>Tianming Lu, Weilong Zhang, Wuwei Mao, Yu Huang</p>
15:30~15:50 <u>No.3-2</u>	<p>Numerical study of the effect of initial water content on dynamic responses of unsaturated slopes</p> <p><u>Yi Xie</u> <i>Shanghai Jiao Tong University</i></p> <p>Guanlin Ye, Yonglin Xiong, Wenxuan Zhu</p>
15:50~16:10 <u>No.3-3</u>	<p>Influence range evaluation of landslides under effect of spatial variability of cohesion</p> <p><u>Weijie Zhang</u> <i>Hohai University</i></p> <p>Wei Zhang, Yu Chen, Jian Ji</p>
16:10~16:30 <u>No.3-4</u>	<p>Effect of the tree-root system behavior on slopes during an earthquake considering the root form</p> <p><u>Yoshikazu Tanaka</u> <i>Kyoto University</i></p> <p>Kyohei Ueda, Ryosuke Uzuoka</p>
16:30~16:50 <u>No.3-5</u>	<p>System dynamic reliability evaluation of multi failure modes of embankment in liquefied site subjected to strong earthquake excitation</p> <p><u>Min Xiong</u> <i>Tongji University</i></p> <p>Yu Huang</p>

Friday, 18 March, 2022

Breakout [Room4]

15:10~16:50 Session 4

Chairman: Chih Wei LU *National Taiwan University of Science and Technology*

15:10~15:30 <u>No.4-1</u>	<p>Failure behavior of deposit slope under earthquake considering soil-bedrock interface effect</p> <p><u>Bing Yang</u> <i>Southwest Jiaotong University</i> Zihong Zhou, Huaxi Wang, Zhirun Chen</p>
15:30~15:50 <u>No.4-2</u>	<p>Research on Development Characteristics and Formation Mechanism of Xigou Debris Flow in the Three Gorges Reservoir Area, China</p> <p><u>Zhenwei Dai</u> <i>Wuhan Center of China Geological Survey</i> Yueping Yin, Shilin Zhang, Xiaolin Fu, Yanjun Zhang, Heng Wang</p>
15:50~16:10 <u>No.4-3</u>	<p>Enhanced mobility of granular flow under near-fault seismic motions</p> <p><u>Chongqiang Zhu</u> <i>Heriot-Watt University</i> Yu Huang, Jin Sun</p>
16:10~16:30 <u>No.4-4</u>	<p>Stability analysis of cutting slope under the coupling effect of vehicle loading and freeze-thaw</p> <p><u>Jian Huang</u> <i>Chengdu University of Technology</i> Zicheng He, Tan Zeng, Changkuo Wang</p>
16:30~16:50 <u>No.4-5</u>	<p>Three-dimensional modelling on the impact behavior of debris flows in earthquake-hit areas based on particle flow code</p> <p><u>Zili Dai</u> <i>Shanghai University</i> Kai Xu, Shiwei Qin</p>

Friday, 18 March, 2022

Breakout [Room1]

17:10~18:50 Session 5

Chairman: Jianxiu WANG *Tongji University*

17:10~17:30 <u>No.5-1</u>	<p>Excavation analysis on a large-scale slope considering effects of fold structure and in-situ stress</p> <p><u>Yuan Kaixuan</u> <i>Kyoto University</i></p> <p>Yuusuke Miyazaki, Wataru Kunimatsu, Kohei Miki, Tomihiko Ohishi, Kiyoshi Kishida</p>
17:30~17:50 <u>No.5-2</u>	<p>Hazard assessment for earthquake-induced damage on earth dam of a farm pond in various seismic zone</p> <p><u>Md Asad Ahmad</u> <i>National Taiwan University of Science and Technology</i></p> <p>Chih Wei Lu, Chi Cheng Wu, Chen Yu Chen</p>
17:50~18:10 <u>No.5-3</u>	<p>A novel application of depth sensing for slope failure: 1G slope model experiment with surface flow and seepage flow</p> <p><u>Tanawat Tangjarusritaratorn</u> <i>Kyoto University</i></p> <p>Yuusuke Miyazaki, Tomoya Fukuoka, Hisakazu Shigemori, Junichi Susaki, Kiyoshi Kishida</p>
18:10~18:30 <u>No.5-4</u>	<p>Visualization of Safety Factor of Slope and Rainfall Characteristic by Integrated FEM with Circular Slip and Seepage analyses</p> <p><u>Tomoya Fukuoka</u> <i>Kyoto University</i></p> <p>Yuusuke Miyazaki, Kiyoshi Kishida, Tomofumi Koyama, Masamitsu Fujimoto, Teruyuki Fujiwara, Yoshimasa Nakagawa, Yoshiharu Oshita</p>

Friday, 18 March, 2022

Breakout [Room2]

17:10~18:50 Session 6

Chairman: Guanlin YE *Shanghai Jiao Tong University*

17:10~17:30 <u>No.6-1</u>	<p>Slope failure analysis by Discrete Element Method</p> <p><u>Yusuke Kanai</u> <i>Tokyo Electric Power Services Co., Ltd.</i> Hitoshi Nakase, Ahmed Ashour, Takeshi Matsushima</p>
17:30~17:50 <u>No.6-2</u>	<p>Shaking Table Tests on Underwater Slope Failure Induced by Liquefaction</p> <p><u>Xiaoqing Feng</u> <i>Tongji University</i> Bin Ye, Jie He</p>
17:50~18:10 <u>No.6-3</u>	<p>Strength Properties of Volcanic Ash Soil Collected from a Large-Scale Slope Failure Site in Hokkaido</p> <p><u>Naoki Tajima</u> <i>The university of Tokyo</i> Tomoya Onodera, Kenji Watanabe, Hiroyuki Kyokawa</p>
18:10~18:30 <u>No.6-4</u>	<p>Effect of Strength Reduction on Seismic Instability of Reclaimed Embankment on Volcanic Cohesive Soil Ground</p> <p><u>Haruna Murakami</u> <i>Fukuoka University Graduate School</i> Satoshi Murakami, Tomomi Nishi</p>
18:30~18:50 <u>No.6-5</u>	<p>Modelling of post-earthquake flow slide in dilative sand slopes</p> <p><u>Xing Wei</u> <i>Southwest Jiaotong University</i> Yanling Liu</p>

Friday, 18 March, 2022

Breakout [Room3]

17:10~18:50 Session 7

Chairman: Wei-Lin LEE *National Science and technology center for disaster reduction*

17:10~17:30 <u>No.7-1</u>	<p>Ground-anchored slope stability based on variation of tensile forces acting on ground-anchors</p> <p><u>Takashi Hara</u> <i>University of Toyama</i> Naoki Tatta, Atsushi Yashima</p>
17:30~17:50 <u>No.7-2</u>	<p>Building / Construction Information Modeling, Management (BIM/CIM) for landslide countermeasure facilities</p> <p><u>Akihiro Kishihata</u> <i>Wakayama Sabo Research and Education Institute</i> Satoru Morikawa, Hisashi Kameda</p>
17:50~18:10 <u>No.7-3</u>	<p>Development of physical modeling system for progress failure of embankment slopes under hydraulic action</p> <p><u>Yoshihisa Miyata</u> <i>National Defense Academy of Japan</i> Shintaro Miyamoto</p>
18:10~18:30 <u>No.7-4</u>	<p>Effect of Length and Spacing of Horizontal Drains on Reduction of Porewater Pressure on Slip Surface</p> <p><u>Mihira Lakruwan</u> <i>Tohoku University</i> Akiyoshi Kamura, Motoki Kazama</p>
18:30~18:50 <u>No.7-5</u>	<p>Trial of New Traffic Restriction in Consideration of Soil Moisture</p> <p><u>Yuusuke Miyazaki</u> <i>Kyoto University</i> Kiyoshi Kishida, Nobuyuki Torii, Tomofumi Koyama, Masamitsu Fujimoto, Kosei Yamaguchi, Yoshimasa Nakagawa, Yoshiharu Oshita, Hirotaka Ishibasi</p>

Saturday, 19 March, 2022

Breakout [Room1]

10:40~12:20 Session 8

Chairman: Bin YE *Tongji University*

10:40~11:00 <u>No.8-1</u>	<p>Reliability-based optimization design of stabilizing piles in slope dynamic system under random seismic excitation</p> <p><u>Zhengying He</u> <i>Tongji University</i> Zhengying He, Zhiyi Chen, Chunxiang Li, Atsushi Yashima</p>
11:00~11:20 <u>No.8-2</u>	<p>Wide / narrow-area slope stability analysis considering infiltration and runoff during heavy precipitation</p> <p><u>Wentao He</u> <i>Hokkaido University</i> Tatsuya Ishikawa, Yulong Zhu</p>
11:20~11:40 <u>No.8-3</u>	<p>Risk Assessment of Slopes under Different Rainfall Intensity based on Model Test</p> <p><u>Yan Liu</u> <i>Kyushu University</i> Hemanta Hazarka, Haruichi Kanaya, Osamu Takiguchi, Rohit Divyesh</p>
11:40~12:00 <u>No.8-4</u>	<p>Examination of a method to evaluate earthquake-induced slope failure hazard using the AHP</p> <p><u>Masanori Kohno</u> <i>Tottori University</i> Yuki Higuchi, Yusuke Ono</p>
12:00~12:20 <u>No.8-5</u>	<p>Full scale experiments for rockfall protection wall using large size soil-bags</p> <p><u>Daisuke Ueda</u> <i>Gifu University</i> Atsushi Yashima, Kazuhide Sawada, Masakazu Namba, Motoyuki Hayashi</p>

Saturday, 19 March, 2022

Breakout [Room2]

10:40~12:20 Session 9

Chairman: Kenjiro TERADA *Tohoku University*

10:40~11:00 <u>No.9-1</u>	<p>3D deformation and failure characteristics of an expressway high slope and application in monitoring optimization</p> <p><u>Jianxiu Wang</u> <i>Tongji University</i> Huboqiang Li, Puzhuo Tian, Xuezheng Liu</p>
11:00~11:20 <u>No.9-2</u>	<p>A modified deformation coordination model for internal force calculation of anchored pile</p> <p><u>Boyu Fu</u> <i>Tongji University</i> Yu Huang, Zhen Guo</p>
11:20~11:40 <u>No.9-3</u>	<p>Landslide risk assessment during rainfall based on a prediction model for surface water and groundwater: A case study in Kajang, Selangor, Malaysia</p> <p><u>Thang Van Nguyen</u> <i>Gunma University</i> Nanaha Kitamura, Akihiko Wakai, Go Sato, Takashi Kimura, Ashraf Osman, David Toll, Aizat Mohd Taib, Mohd Raihan Taha</p>
11:40~12:00 <u>No.9-4</u>	<p>Deformation assessment and slope stabilization design for the excavation of an in-service expressway</p> <p><u>Misa Hiraga</u> <i>Shimizu Corporation</i> Keiji Sakuradani, Daiki Nishioka, Kengo Ohmi, Masaya Kawata, Toshifumi Yamamoto, Satoshi Torii, Taro Takamori</p>
12:00~12:20 <u>No.9-5</u>	<p>Stabilization of huge and unstable rock mass on national highway slope based on 3-D stability analysis</p> <p><u>Tomoya Kawahara</u> <i>Chuo Fukken Consultants</i> Tomohiko Okuno, Makoto Hachiya, Kiyonori Okuda, Genki Hirane</p>

Saturday, 19 March, 2022

Breakout [Room3]

10:40~12:20 Session 10

Chairman: Motoki KAZAMA *Tohoku University*

10:40~11:00 <u>No.10-1</u>	<p>Reliability analysis of soil–water characteristics curve and its application to slope stability analysis</p> <p><u>Gengyun liu</u> <i>University of Shanghai for Science and Technology</i> You-Liang Chen</p>
11:00~11:20 <u>No.10-2</u>	<p>Influence of Random Field Variability of Uncertainty Strength Parameters and Anchor Stresses: A Case Study Slope Failure in Northern Taiwan</p> <p><u>An-Jui Li</u> <i>National Taiwan University of Science and Technology</i> Hsiu-Chen Wen, Varian Harwin Batistuta, Shih-Hao Cheng</p>
11:20~11:40 <u>No.10-3</u>	<p>Risk Assessment of Cut Slopes on the Nishi-Kyushu Expressway</p> <p><u>Koji Yamashita</u> <i>Kiso-Jiban Consultants Co., Ltd.</i> Hiroaki Takamoto, Hiroshi Kochihira</p>
11:40~12:00 <u>No.10-4</u>	<p>Strength interpretation for Zhujiajian submarine slope based on CPTU calibration chamber test</p> <p><u>Kuanjun Wang</u> <i>POWERCHINA Huadong Engineering Corporation Limited</i> Zhigang Shan, Liuyuan Zhao, Miaojun Sun, Yi Hong, Hao Wu</p>
12:00~12:20 <u>No.10-5</u>	<p>Numerical Analyses on Rainfall Induced Deformation of a Slope with a Disturbed Surface Layer</p> <p><u>Mai Sawada</u> <i>Kyoto University</i> Mamoru Mimura, Yuta Nakano</p>

Saturday, 19 March, 2022

Breakout [Room 1]

13:10~14:50 Session 11

Chairman: Hu ZHENG *Tongji University*

13:10~13:30 <u>No.11-1</u>	<p>Performance of root-pile group foundation of check dam structurally separated from the dam body</p> <p><u>Akiyoshi Kamura</u> <i>Tohoku University</i> Tomomi Kaneko, Noboru Sato, Motoki Kazama</p>
13:30~13:50 <u>No.11-2</u>	<p>Influences of hydrate decomposition on infinite slopes using a coupled Tough+Hydrate+DEM approach</p> <p><u>Siyuan Wang</u> <i>Tianjin University</i> Mingjing Jiang, Guangshuai Li</p>
13:50~14:10 <u>No.11-3</u>	<p>Comparing the discontinuity surface, fracture lines extracted by γ lines and fracture crossing lines of the collapsed form in the heavy rains in August 2021</p> <p><u>Shotaro Oda</u> <i>Fukuoka University Graduate School</i> Satoshi Murakami, Tatsuro Yoshimura, Mitsuaki Murashima, Haruna Murakami</p>
14:10~14:30 <u>No.11-4</u>	<p>Back analysis of a high geosynthetic-reinforced slope failure at Yeager Airport</p> <p><u>Rui Sun</u> <i>Tongji University</i> Jianfeng Chen, Ming Peng</p>

Saturday, 19 March, 2022

Breakout [Room 2]

13:10~14:50 Session 12

Chairman: Weijie ZHANG *Hohai University*

13:10~13:30 <u>No.12-1</u>	<p>The Effect of Particle Size Distribution on Granular Flow Simulation Using Discrete Element Method</p> <p><u>Daiki Watanabe</u> <i>Tohoku University</i> Shuji Moriguchi, Kenjiro Terada</p>
13:30~13:50 <u>No.12-2</u>	<p>Development of AE Sources Localizations Method based on Use of Ray-Tracing for Optimizing Computation Times</p> <p><u>Katsuya Nakamura</u> <i>Nihon University</i> Yoshikazu Kobayashi, Kenichi Oda, Satoshi Shigemura</p>
13:50~14:10 <u>No.12-3</u>	<p>Stability of slopes with bedrock considering surcharge and pore water pressure effect</p> <p><u>Jiangrong Hou</u> <i>Southwest Jiaotong University</i> Bing Yang, Yang Luo</p>
14:10~14:30 <u>No.12-4</u>	<p>Failure of man-made embankment reservoir due to water seepage through mud drainage pipe and remedial works</p> <p><u>Jirat Teeparaksa</u> <i>Kasetsart University</i> Wanchai Teeparaksa</p>
14:30~14:50 <u>No.12-5</u>	<p>Pattern Classification and Creep Behavior of Submarine Landslide Motions Based on Slide Kinematics</p> <p><u>Hiromasa Iwai</u> <i>Nagoya Institute of Technology</i> Shumpei Yasui, Feng Zhang</p>

Saturday, 19 March, 2022

Breakout [Room 3]

13:10~14:50 Session 13

Chairman: Zili DAI *Shanghai University*

13:10~13:30 <u>No.13-1</u>	<p>Physical modelling of piles under lateral loading with transparent soils</p> <p><u>Hideto Nonoyama</u> <i>National Defense Academy of Japan</i> Yoshihisa Miyata</p>
13:30~13:50 <u>No.13-2</u>	<p>Hydrologic-geotechnical Modelling for Multihazard Analysis of Landslide and Flood caused by Heavy Rainfall</p> <p><u>Nilo Lemuel Junio Dolojan</u> <i>Tohoku University</i> Shuji Moriguchi, Masakazu Hashimoto, Nguyen Xuan Tinh, Hitoshi Tanaka, Kenjiro Terada</p>
13:50~14:10 <u>No.13-3</u>	<p>Investigation of basin for sediment flows on mountainous road due to heavy rain in Gero City, Japan.</p> <p><u>Tatsuo Nirasawa</u> <i>Dainichi Consultant Inc.</i> Takafumi Fujii, Suguru Suenaga, Kazuhide Sawada</p>
14:10~14:30 <u>No.13-4</u>	<p>A Bayesian Model of Shallow Landslides Established by Extracting the Time-Series Features of Rainfall Event</p> <p><u>Isao Onishi</u> <i>Ritsumeikan University</i> Masamitsu Fujimoto</p>
14:30~14:50 <u>No.13-5</u>	<p>Ground Water Level Changes and Deformation Behaviors on Slope Failure Initiation due to Rainfall</p> <p><u>Qin Xin</u> <i>Ritsumeikan University</i> Masamitsu Fujimoto, Yoshifumi Satofuka</p>