



# International Symposium on Seismic Performance and Design of Slopes

Tongji University, Shanghai China

17<sup>th</sup>-19<sup>th</sup> August 2018

# PROGRAM



Hosted by



同濟大學  
TONGJI UNIVERSITY

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## Saturday, 18<sup>th</sup> August 2018

### Opening Ceremony and Keynote Lectures (Room C201, Sino-French Center of Tongji University)

8:20~8:40      **Open Ceremony (Chaired by Prof. Yu Huang)**

9:00~10:10    **Keynote Lecture (Chaired by Prof. Fawu Wang & Prof. Xinli Hu)**

- **Seismic disruption of mountain slopes and disaster mitigation (35 Mins)**  
Prof. Ikuo Towhata Kanto Gakuin University, Japan
- **Slope response of seismic motion based on field monitoring and shake table test (35 Mins)**  
Prof. Qiang Xu Chengdu University of Technology, China

10:30~12:15    **Keynote Lecture (Chaired by Prof. Wanghua Sui & Prof. Guangqi Chen )**

- **A Lagrangian Gradient Smoothing Method (L-GSM) for earthquake-induced landslides simulation (35 Mins)**  
Prof. Guirong Liu University of Cincinnati, USA
- **Recent landslides triggered by moderate earthquakes in Japan (35 Mins)**  
Prof. Fawu Wang Shimane University, Japan
- **Performance-based seismic design of buildings in mainland China (35 Mins)**  
Prof. Huanjun Jiang Tongji University, China

14:00~15:45    **Keynote Lecture (Chaired by Prof. Chih-Wei Lu & Prof. Chun Liu)**

- **Deformation characteristics of Majiagou landslide by in-situ monitoring (35 Mins)**  
Prof. Xinli Hu China University of Geosciences (Wuhan), China
- **Effect of the post-cyclic hardening response of liquefied soil on the seismic stability of slopes (35 Mins)**  
Dr. Domenico Lombardi University of Manchester, UK
- **Insight into the complex debris morphologies of the Luanshibao deposit in Tibetan Plateau , China (35 Mins)**  
Prof. Qiangong Cheng Southwest Jiaotong University, China

16:00~18:00    **Parallel Sessions**

Time	Room C201, Sino-French Center of Tongji University Chair: <i>Domenico Lombardi &amp; Miao Yu</i>	Room A401, Sino-French Center of Tongji University Chair: <i>Shuji Moriguchi &amp; Ping Yang</i>
16:00~16:30	Dynamic response of a rigid barrier under impact of debris flows with various solid fraction ( <b>Invited</b> ) <i>Dongri Song</i> <i>Institute of Mountain Hazards and Environment, CAS, China</i>	Performance-based multi-objective optimization for design of stabilizing piles embedded in flysh ( <b>Invited</b> ) <i>Changdong Li</i> <i>China University of Geosciences (Wuhan), China</i>
16:30~17:00	An early warning monitoring of earthquake-induced slope failures by monitoring inclination changes in multi-point tilt sensors ( <b>Invited</b> ) <i>Lin Wang</i> <i>Chuo Kaihatsu Corporation, Japan</i>	Developing large scale simulations for slope stability analysis based on FDPS ( <b>Invited</b> ) <i>Jian Chen</i> <i>RIKEN Center for Computational Science, Japan</i>
17:00~17:20	A note on the time-dependent reliability analysis of slopes <i>Min Xiong</i> <i>Tongji University, China</i>	Insight into the normal stress-dependent frictional weakening of large rock avalanche basal facies <i>Yufeng Wang</i> <i>Southwest Jiaotong University, China</i>
17:20~17:40	Numerical study of seismic landslide dam failure and resulted flooding <i>Yunxu Xie</i> <i>Institute of Mountain Hazards and Environment, CAS, China</i>	Seismic behaviors of rock slopes with different lithology and structures in a shaking table test <i>Hanxiang Liu</i> <i>Chengdu University of Technology, China</i>
17:40~18:00	Stability analysis of soil slope based on a water-soil-coupled and parallelized Smoothed Particle Hydrodynamics model <i>Weijie Zhang</i> <i>Hohai University, China</i>	A preliminary experimental study on overtopping breaching of landslide dam <i>Mingjun Zhou</i> <i>Institute of Mountain Hazards and Environment, CAS, China</i>

## Sunday, 19<sup>th</sup> August 2018

### Keynote Lectures (Room C201, Sino-French Center of Tongji University)

8:30~9:40 **Keynote Lecture (Chaired by Prof. Guirong Liu & Prof. Changdong Li)**

- **Finite element analysis on slope failure within unsaturated ground in fully-coupled scheme of soil–water–air (35 Mins)**

Prof. Feng Zhang Nagoya Institute of Technology, Japan

- **A preliminary prediction method of landslide motion velocity using basic mathematics and data from seismic stations (35 Mins)**

Prof. Chih-Wei Lu National Kaohsiung University of Science and Technology, China

10:00~11:45 **Keynote Lecture (Chaired by Prof. Ikuo Towhata & Prof. Feng Zhang)**

- **Pulse-like ground motions vs peak ground acceleration on the initiation of co-seismic landslides (35 Mins)**

Prof. Guangqi Chen Kyushu University, Japan

- **Effects of spatial distributions of slope in DEM rockfall simulations (35 Mins)**

Prof. Shuji Moriguchi Tohoku University, Japan

- **Stochastic simulation and dynamic reliability analysis of earth structures (35 Mins)**

Prof. Yu Huang Tongji University, China

14:00~16:00 **Parallel Sessions**

Time	Room C201, Sino-French Center of Tongji University Chair: Shuai Zhang & Weijie Zhang	Room A401, Sino-French Center of Tongji University Chair: Jing Ni & Wuwei Mao
14:00~14:30	Performance monitoring of slopes using distributed fiber optic sensors ( <b>Invited</b> ) <i>Honghu Zhu</i> <i>Nanjing University, China</i>	Experimental and numerical study of the mechanical properties of granite after high temperature exposure ( <b>Invited</b> ) <i>Youliang Chen</i> <i>University of Shanghai for Science and Technology, China</i>
14:30~15:00	Shaking table tests on reinforced segmental retaining walls subjected to rainfall-earthquake combined effect ( <b>Invited</b> ) <i>Feifan Ren</i> <i>Tongji University, China</i>	Automatic mapping of slope failures after the Jiuzhaigou earthquake ( <b>Invited</b> ) <i>Ping Lu</i> <i>Tongji University, China</i>
15:00~15:20	Correction of Newmark model and a method of risk zoning for earthquake triggered landslide <i>Kaiping Jin</i> <i>Shanghai Jiao Tong University, China</i>	Numerical simulation on the stability of railway embankment subjected to repeated drying-wetting loops and train loads <i>Yi Xie</i> <i>Shanghai Jiao Tong University, China</i>
15:20~15:40	Winkler model for seismic response of shafts under stochastic earthquakes <i>Bu Zhang</i> <i>Tongji University, China</i>	Parameter optimization design of double-row piles with anchor cable structure for a permanent high slope under complicated geological conditions <i>Chengtang Wang</i> <i>Institute of Rock and Soil Mechanics, CAS, China</i>
15:40~16:00	The simulation of the stochastic slip distribution of earthquake rupture <i>Yi Zhong</i> <i>Tongji University, China</i>	Reliability evaluation of slope failure under seismic loading based on probability density evolution method <i>Geye Li</i> <i>Tongji University, China</i>

16:10 to 16:30 **Closing Ceremony (Room C201, Sino-French Center of Tongji University)**