**GSP 304** 



# IACGE



## 2018

Geotechnical and Seismic Research and Practices for Sustainability

Proceedings of the International Conference on Geotechnical and Earthquake Engineering 2018

Chongqing, China October 20–21, 2018



Edited by

Jianping Hu; Wengang Zhang;



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### GEOTECHNICAL AND SEISMIC RESEARCH AND PRACTICES FOR SUSTAINABILITY

PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON GEOTECHNICAL AND EARTHQUAKE ENGINEERING 2018

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EDITED BY
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#### **Preface**

This Geotechnical Special Publication contains selected technical papers of the 2018 International Conference on Geotechnical and Earthquake Engineering organized by the International Association of Chinese Geotechnical Engineers (IACGE) and the Chongqing University. The conference covers a broad field of topics in geotechnical and geotechnical earthquake engineering, including soil dynamics and earthquake engineering, foundation engineering and pile testing, excavation and shoring, embankments and retaining walls, tunnels and underground structures, dams and levees, slopes and landslides, expansive soils and loess, geology and rock mechanics, ground improvement techniques, geotechnical numerical modeling and computation, geotechnical support technologies during construction and offshore wind power pile foundations.

About one hundred and thirty abstracts were received in response to the Call for Papers. The abstracts were reviewed by the organizing committee and one hundred invitations were extended to prepare and submit full-length papers. A total of eighty full-length papers were received in response to these invitations.

The papers were reviewed following the same procedures and technical standards of the ASCE Geotechnical Special Publications. Each paper must have received two positive reviews to be accepted and must have revised to conform to the mandatory revisions of the reviewers. A number of papers went through more than one cycle of review and revision. Standard editorial review forms and checklists were utilized to maintain uniform technical standards of the papers. As a result, sixty-nine papers were accepted for the conference and included in this ASCE Geotechnical Special Publications. All the papers selected for the Geotechnical Special Publications are eligible for discussion in the ASCE Journal of Geotechnical and Geoenvironmental Engineering and for ASCE award nominations.

This publication would not have been possible without the dedication and professionalism of the paper reviewers. The names of these highly qualified reviewers are listed in the followings.

BIAN, Xuecheng	JIN, Xiaoguang	TANG, Chaosheng
CAI, Xiaoguang	JIN, Xiaoguang	Tang, Liang
CAO, Zijun	Kong, Gangqiang	TANG, Xiaosong
Chen, Qingsheng	KOU, Hailei	Tang, Xiaowei
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Cheng, Liang	Li, Jinghui	WANG, Yingchao
Cheng, Xuesong	LI, Lihua	WU, Shuguang
CHENG, Xuesong	LI, Xueyou	WU, Yongxin
CHENG, Yi	LI, Yuchao	Yan, Liping

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CUI, Xinzhuang LIANG, Fayun YUAN, Jie DAI, Guoliang LIANG, Ninghui YUAN, Junping DENG, Yongfeng LIANG, Xu Zhang, Dongming DIAO, Yu LIU, Chun ZHANG, Fei LIU. Huabei ZHANG, Kunyong DONG, You DU, Yanjun Zhang, Lei Liu, Jianfeng Fan, Lifeng LIU, Junwei ZHANG, Lulu FANG, Hongyuan LIU, Xiaolei Zhang, Peng ZHANG, Rongjun FENG, Shijin LIU, Xuewei FU, Qiang LU, Liang ZHANG, Shuai GAO, Hongmei LV, Qing Zhang, Sulei GAO, Lei MEI, Guoxiong ZHAO, Gaofeng GAO, Yanan Miao, Yu ZHAO, Xiaoyan GONG, Wenping Min, Zhang ZHAO, Yu HE, Jia PAN, Xiaohua ZHENG, Changjie HONG, Yi ZHENG, Jun PENG, Jie Huang, Duruo PU, Hefu ZHONG, Zuliang JI, Jian Sun, Li Zhou, Hang JI, Jian SUN, Liqiang Zhou, Mi JIANG, Qinghui TAN, Fei Zhuang, Haiyang Jiang, Xiang

We are thankful to the Chongqing University for hosting this conference. Thanks are also extended to ASCE Geo-Institute to support this conference. The editors also acknowledge the assistance of ASCE Geo-Institute staffs in the final production of this Geotechnical Special Publication.

Finally, we would like to express our sincere appreciation to all the authors for their significant contributions to the success of the conference.

Jianping Hu Los Angeles Department of Water and Power

Wengang Zhang Chongqing University

Xiong (Bill) Yu Case Western Reserve University

Hanlong Liu Chongqing University

September 2018

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