ISEV2018

8th International Symposium on Environmental Vibration and Transportation Geodynamics & 2nd Young Transportation Geotechnics Engineers (YTGE) Meeting

Organizer: Central South University
Sponsor: ISSMGE TC202
Transportation Geotechnics
Chinese Society of Civil Engineers
(To be added)
Co-sponsor: (To be added)

26-28 October 2018
Changsha, China
Contents

Welcome.........................................................................................................................1
KEY DATE ....................................................................................................................3
Committee ....................................................................................................................3
  Scientific Committee .................................................................................................3
  Organizing Committee ..............................................................................................6
Practical Information ....................................................................................................9
Welcome

The 8th International Symposium on Environmental Vibration and Transportation Geodynamics (formerly named as the International Symposium on Environmental Vibration) will be held on October 27-28, 2018 at Central South University, Changsha, China. In 2003, the first symposium was initiated by Prof. H. Takemiya of Okayama University, Japan and Prof. Yunmin Chen of Zhejiang University, China, and held in Zhejiang University, Hangzhou, China. The subsequent six symposia were successfully convened in Okayama University, Japan (2005), National Taiwan University, Taipei (2007), Beijing Jiaotong University, China (2009), Southwest Jiaotong University, China (2011), Tongji University, China (2013), and Zhejiang University, China (2016), respectively. With the increasing impact over academia and industry, the symposia have attracted much attention from government officials, scientific and research communities, and engineering professionals. Geotechnical challenges associated with dynamic loads on railroad track and road pavements often require scientific and technological breakthroughs for design innovations. To effectively reflect such frontiers, this symposium has been renamed as International Symposium on Environmental Vibration and Transportation Geodynamics since 2016, and held under the auspices of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) TC202 Transportation Geotechnics Committee. The scope of the 8th International Symposium on Environmental Vibration and Transportation Geodynamics 2018 (ISEV 2018) will continue to cover environmental vibrations induced by industrial, civilian and transportation activities, problems associated with dynamic vehicular loading on road foundations, and sustainability challenges of transportation infrastructures and the built environment. The symposium will consist of workshops (including one dedicated to Young Transportation Geotechnics Engineers) and plenary and breakout sessions as well as a technical exhibition for dissemination of research findings and engineering best practices. Since it will serve as a significant platform for academic exploration, experience exchange, and thought inspiration amongst the practitioners engaged in management, design and construction of large-scale civil and transportation infrastructure, researchers, academics and students; engineers; planning, design construction and management engineering companies; decision makers; transport infrastructures managers; owners and governmental bodies are especially encouraged to attend this symposium.
Associated with the ISEV 2018 event, the 2nd Young Transportation Geotechnics Engineers (YTGE) meeting will be concurrently held on October 26, 2018. The 1st meeting of the YTGE associated with the 3rd International Conference on Transportation Geotechnics (ICTG) was successfully convened at University of Minho, Guimarães, Portugal on September 4, 2016. This forum was organized and hosted by students at the University of Minho with student participation from all around the world. It covered all the disciplines in transportation geotechnics (roads, highways, bridges, airports, railways, waterways, canals and terminals - harbors). For the first time, it created a knowledge exchange network and compiled what the best and most advanced practices worldwide in the transportation geotechnics field are either in academic or in industrial domains. The YTGE network will also be created in the framework of the ISEV 2018 event and will be held in Changsha, China on October 26, 2018. The main goal of this forum will be to increase the attractiveness of the transportation geotechnics field for younger generations of geotechnical engineers (less than 35 years old), whilst contributing to strengthen the role of young engineers in society. The network will be responsible for organizing several initiatives for the young geotechnical community. The aims are to provide an international forum for doctoral and post-doctoral students as well as research engineers and engineers involved in innovation in transportation geotechnics, to present and discuss their main research results, and to identify future research and engineering practice needs. Relevant work related to all disciplines in transportation geotechnics are sought out for the 2nd YTGE meeting in the form of a two-page extended abstract and workshop presentation. All submissions (extended abstract and presentation) will be compiled into a USB drive and made available to all YTGE members.

We are pleased to invite you to be part of the ISEV 2018 event and 2nd YTGE meeting.

We look forward to welcoming you to Changsha in October 2018.

Prof. Erol Tutumluer
Chair of the Conference

Prof. Zhiwu Yu
Co-Chair of the Conference
KEY DATE

Deadline for Abstract submission   January 31, 2018
Notify authors of accepted abstracts   February 21, 2018
Deadline for Full-length paper submission   May 31, 2018
Notify authors of accepted papers   August 31, 2018
Submission of final camera-ready papers   September 15, 2018

Committee

Scientific Committee

Honorary Chairmen

Prof. Emeritus Hirokazu Takemiya   Okayama University, Japan
Prof. Yeongbin Yang   National Taiwan University, Taipei
Prof. Wanming Zhai   Southwest Jiaotong University, China
Prof. Huawu He   China Railway, China
Prof. Yunmin Chen   Zhejiang University, China
Prof. Hongqi Tian   Central South University, China

Chairmen

Prof. Erol Tutumluer   University of Illinois at Urbana-Champaign
Prof. Zhiwu Yu   Central South University

Members

Lutz Auersch   Federal Institute for Materials Research and Testing, Germany
Dimitri E. Beskos   University of Patras, Greece
António Gomes Correia   University of Minho, Portugal
Jinchun Chai   Saga University, Japan
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renpeng Chen</td>
<td>Hunan University, China</td>
</tr>
<tr>
<td>Yujun Cui</td>
<td>Ecole des Ponts ParisTech, France</td>
</tr>
<tr>
<td>Yuanqiang Cai</td>
<td>Zhejiang University, China</td>
</tr>
<tr>
<td>Songyu Liu</td>
<td>Southeast University, China</td>
</tr>
<tr>
<td>Geert Degrande</td>
<td>University of Leuven, Belgium</td>
</tr>
<tr>
<td>Guangyun Gao</td>
<td>Tongji University, China</td>
</tr>
<tr>
<td>Liang Gao</td>
<td>Beijing Jiaotong University, China</td>
</tr>
<tr>
<td>Hai Huang</td>
<td>Pennsylvania State University, USA</td>
</tr>
<tr>
<td>Hong Hao</td>
<td>Curtin University of Cambridge, UK</td>
</tr>
<tr>
<td>Hugh Hunt</td>
<td>University of Cambridge, UK</td>
</tr>
<tr>
<td>Jie Han</td>
<td>University of Kansas, USA</td>
</tr>
<tr>
<td>Maosong Huang</td>
<td>Tongji University, China</td>
</tr>
<tr>
<td>Toshiki Hamamoto</td>
<td>University of Toyama, Japan</td>
</tr>
<tr>
<td>Buddhima Indraratna</td>
<td>University of Wollongong, Australia</td>
</tr>
<tr>
<td>Tatsuya Ishikawa</td>
<td>Hokkaido University, Japan</td>
</tr>
<tr>
<td>Jianqun Jiang</td>
<td>Zhejiang University, China</td>
</tr>
<tr>
<td>Shenghao Ju</td>
<td>National Cheng-Kung University, Tainan</td>
</tr>
<tr>
<td>Songyu Liu</td>
<td>Southeast University, China</td>
</tr>
<tr>
<td>Xiaoyan Lei</td>
<td>East China Jiaotong University, China</td>
</tr>
<tr>
<td>Xianzhang Ling</td>
<td>Harbin Institute of Technology, China</td>
</tr>
<tr>
<td>Andrei V. Metrikine</td>
<td>Delft University of Technology, Netherlands</td>
</tr>
<tr>
<td>Jin Y Ooi</td>
<td>The University of Edinburgh, UK</td>
</tr>
<tr>
<td>Taesoon Park</td>
<td>Seoul National University of Science and Technology, South Korea</td>
</tr>
<tr>
<td>William Powrie</td>
<td>University of Southampton, UK</td>
</tr>
<tr>
<td>Yonglin Pi</td>
<td>The University of New South Wales, Australia</td>
</tr>
<tr>
<td>Jiping Ru</td>
<td>Natural Science Foundation of China, China</td>
</tr>
<tr>
<td>Ted Sussmann</td>
<td>University of Hartford, USA</td>
</tr>
<tr>
<td>Erol Tutumluer</td>
<td>University of Illinois at Urbana-Champaign, USA</td>
</tr>
<tr>
<td>Fumio Tatsuoka</td>
<td>Tokyo University of Science, Japan</td>
</tr>
<tr>
<td>Fuming Wang</td>
<td>Zhengzhou University, China</td>
</tr>
<tr>
<td>Linbing Wang</td>
<td>Virginia Polytechnic Institute and State University, USA</td>
</tr>
</tbody>
</table>
Ping Wang
Southwest Jiaotong University, China

Nan Zhang
Beijing Jiaotong University, China

Weiping Xie
Wuhan University of Technology, China

Yangping Yao
Beihang University, China

Bin Xu
Nanchang Institute of Nottingham, UK

Youlin Xu
The Hong Kong Polytechnic University, HK

Haisui Yu
The University of Nottingham, UK

Jongdar Yau
Tamkang University, Taipei

Jun Yang
The University of Hong Kong, HK

Feng Zhang
Nagoya Institute of Technology, Japan

Franz Ziegler
Vienna University of Technology, Austria

Jiankun Liu
Beijing Jiao Tong University, China

Nan Zhang
Beijing Jiao Tong University, China

Shunhua Zhou
Tongji University, China

Dingqing Li
TTCI, USA

Peter Woodward
University of Leeds, UK

Daichao Sheng
University of New Castle, Australia

Imad L. Al-Qadi
University of Illinois at Urbana-Champaign, USA

Baoshan Huang
University of Tennessee, USA

Soheil Nazarian
University of Texas at El Paso, USA

Anand Puppala
University of Texas at Arlington, USA

Charles Schwartz
University of Maryland, College Park, USA

Carlton Ho
University of Massachusetts, Amherst, USA

Yu Qian
University of South Carolina, USA

Hao Wang
Rutgers University

XiangChen Hou
Harbin Institute of Technology, China

Yiqiu Tan
Harbin Institute of Technology, China

Hainian Wang
Chang’An University

Zhanping You
Michigan Tech, USA

Ma Zhan
CARS, China

Xiaoyan Lei
East China Jiao Tong University, China

Yongle Li
Southwest Jiao Tong University, China
Suched Likitlersuang  Chulalongkorn University, Thailand
Tawatchai Tanchaisawat  Chiang Mai University, Thailand
Xiangsheng Chen  Shenzhen Metro, China
Tong Qiu  Pennsylvania State University, USA
Xiong Zhang  Missouri University of Science and Technology, USA

Organizing Committee

Chairmen
Prof. Chunyang Chen  Central South University, China
Prof. Youjun Xie  Central South University, China

Vice Chairmen
Prof. Shifan Qiao  Central South University, China
Prof. Xiaobin Chen  Central South University, China
Prof. Jinfeng Zou  Central South University, China
Prof. Zhihui Zhu  Central South University, China

Secretary in General
Prof. Yuanjie Xiao  Central South University, China
Prof. Xiaobin Chen  Central South University, China

Members (To be added)
Prof. Xiaobin Chen  Central South University, China
Prof. Jiasheng Zhang  Central South University, China
Prof. Wuming Leng  Central South University, China
Prof. Liangxin Jin  Central South University, China
Prof. Xuemin Zhang  Central South University, China
Prof. Shuying Wang  Central South University, China
Prof. Lianheng Zhao  Central South University, China
Prof. Jinfeng Zou  Central South University, China
Prof. Rusong Nie  Central South University, China
Prof. Yuliang Lin Central South University, China
Prof. Jiandong Niu Central South University, China
Prof. Xuan Wang Central South University, China
Prof. Jidong Teng Central South University, China
Prof. Zheng Han Central South University, China
Prof. Hancheng Dan Central South University, China
Prof. Sheng Zhang Central South University, China
Prof. Linrong Xu Central South University, China
Prof. Xinghua Wang Central South University, China
Prof. Limin Wei Central South University, China
Prof. Chunyan Zhao Central South University, China
Prof. Yuliang Lin Central South University, China
Prof. Peng Tu Central South University, China
Prof. Qi Yang Central South University, China
Prof. Weichao Yang Central South University, China
Prof. Weizheng Liu Central South University, China
Prof. Fang Xu Central South University, China
Prof. Yingfei Du Central South University, China
Prof. Dongping Li Central South University, China
Prof. Degou Cai China Academy of Railway Science, China
Prof. Xuecheng Bian Zhejiang University, China
Prof. Guoqing Jing Beijing Jiaotong University, China
Prof. Hong Xiao Beijing Jiaotong University, China
Prof. Hesong Hu Architectural Design and Research Institute of Guangdong Province, China
Prof. Liang Gao Harbin Institute of Technology, China
Prof. Junhua Xiao Tongji University, China
Prof. Guanshi Liu Institute of Rock and Soil Mechanics, Chinese Academy of Sciences, China
Prof. Yonggui Chen Tongji University, China
Prof. Xiaolin Song Southwest Jiaotong University, China
Prof. Changbin Yan Zhengzhou University, China
Prof. Zhongming He Changsha University of Science & Technology, China
Topics

The Symposium will include aspects of transportation geotechnics focusing on railways, roads, and airfields. Topics will concentrate but not limit to the following:

- Dynamic interaction of vehicle and transportation infrastructure (pavement, railway and airfield)
- Wave propagation and traffic induced structure and ground vibrations
- Environmental vibration issues in Metro
- Soil-structure dynamic interaction problem in transportation
- Analysis and testing on environmental vibration
- Vehicle, machine and human induced vibrations
- Monitoring, evaluation and control of traffic induced vibrations
- Cyclic deformation of soils and transportation foundation settlement
- Structural safety and serviceability of railway, metro, roadway and bridges
- Application of geosynthetics in transportation infrastructure
- Advances in materials characterization, laboratory and field evaluation, and full scale testing (ALF, HVS) and monitoring of roads, railways and airfields
- Stabilization/treatment of foundation geomaterials of roads, railways, and airfields.

Conference Proceedings

- Full-length papers submitted to the conference and accepted after a rigorous peer-review process to be included in the Conference Proceedings published by Procedia Engineering and further submitted for indexing by Web of Science.
- In addition, a selected group of 10 to 15 full-length journal papers will be solicited for publication in a Special Issue of Elsevier’s Transportation Geotechnics journal dedicated to the ISEV 2018 and 2nd YTGE events. Authors who intend to have their papers published in this special issue should clearly indicate their publication interests.
in the abstracts submitted to the conference. The guest editors of this Special Issue will coordinate the reviews of the abstracts received and invite competitively selected authors to submit full-length papers for the peer review process of Transportation Geotechnics journal publication.

- Guest Editors of the Special Issue of Elsevier’s Transportation Geotechnics journal: Prof. Daichao Sheng, Prof. Xiaobin Chen, and Prof. Yuanjie Xiao

Practical Information

Date
The 8th ISEV 2018 will be taken place from Friday 26th October to Sunday 28th October 2018.

Venue
Xiandai Grand Gloria Hotel, Changsha, China

Address
22 South Shaoshan Road Railway campus, Central South University Changsha, China

Registration
Registration desk will open on Friday 26th October from 12h00 till 21h00 at the lobby of Xiandai Grand Gloria Hotel, Changsha.

Onsite Registration Fees
The access to all the General Assembly activities is subject to registration. The invoices can be processed in USD, $ or RMB, ¥.

<table>
<thead>
<tr>
<th>Participation category</th>
<th>Registration rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Full Participant</td>
<td>350 USD</td>
</tr>
<tr>
<td>Participant without Paper</td>
<td>300 USD</td>
</tr>
<tr>
<td>Student Participant</td>
<td>150 USD</td>
</tr>
</tbody>
</table>

Conference Dinner
Only full registration includes conference dinner. Tickets for the conference dinner in the 1st day of registration can be purchased on site for the cost of $90, each. If you would
like to bring guest with you to the dinner you will have to purchase two tickets.

**What is included in your registration?**

✓ Welcome reception;
✓ The buffet dinners and banquet dinner during the conference;
✓ Attendance to all conference sessions;
✓ All tea and coffee refreshments throughout the conference;
✓ Delegates bag and all conference materials; and
✓ An electronic copy of the conference proceedings.

**Climate**

Hunan province is defined as having a Subtropical monsoon climate. At the end of October, the weather in Changsha should be relatively cold and rainy. The average daily temperature varies between 15°C and 23°C.

**Electricity, Power Supply**

220 volts AC, 50Hz. Continental three-pin plugs are in use. Depending on your country, you may need an adapter.

**Liability**

The Organising Committee and/or Conference Organiser shall not be held liable for personal accidents of losses or damage to private property of registered delegates of the Conference. Delegates should make their own arrangements in respect of personal insurance.

**Conference Venue**

Conference location address: Xiandai Grand Gloria Hotel Railway campus, Central South University
Railway campus, Central South University

Xiandai Grand Gloria Hotel
Public transportation:

*The departing time follow is for reference only. It shall be in accordance with the actual condition.

*具体发车时间以实际乘坐为准

*Recommend course

*推荐路线

1. Please buy the corresponding tickets at domestic flight window, in Beijing Capital International Airport.

   国内转机：请在北京首都国际机场的国内航班售票窗口购买相应的机票。

2. Long-distance Coaches: The airport bus Civil Aviation Hotel line will depart from the Changsha Huanghua International Airport to the Civil Aviation Hotel Station, and then change line 107 to Railway Campus Station. Total Ticket Price: 4 RMB. Travel time: 1 hour and 45 min.

   长途客车：机场大巴将从长沙黄花国际机场出发到民航酒店站，然后换乘 107 号线到铁道学院站。票价：4 元人民币。行程时间：1 小时 45 分钟。

   For Taxi (about 65 RMB from Changsha Huanghua International Airport to the conference venue): 22 South Shaoshan Road, Changsha.

   计程车：从长沙黄花国际机场出发到会议地点（长沙韶山南路 22 号）大概 65 元人民币。