Cold regions cover 50% of the world’s total land area. All transportation infrastructures in cold regions face great technical challenges due to ground freeze-thaw or permafrost degradation. New transportation infrastructure on embankments, such as high-speed railways on slab tracks or highways, requires high geometry standards. In China, the Qinghai-Tibet Railway has been in operation for more than 6 years but now faces issues due to permafrost degradation. More challenging technical problems will arise as more transportation infrastructure, such as highways, is being planned and/or constructed in Northwest and Northeastern China, Russia as well as the North America.

The First International Symposium on Transportation Soil Engineering in Cold Regions - a joint conference with the 10th Shahuniants Lecture aims to provide an opportunity for researchers and practitioners in the transportation community to share the latest research advances and experiences in the construction of transportation infrastructure in cold regions. The Shahuniants Lecture has been given regularly among Russian scientists for many years and this is the first time to be given outside of Russia.

Xining City is the capital of the Qinghai province, and it is the beginning of the Qinghai-Tibet railway and the National Highway 109. The operation headquarter of the Qinghai-Tibet railway is also located in this city.

Organized by:
Qinghai Research Institute of Transportation (QRIT), Department of Transportation (DOT) of the Qinghai province, China
Beijing Jiaotong University, China
University of Illinois at Urbana-Champaign, USA
Moscow State University of Railway Transportation, Moscow, Russia
University of Kansas, USA
Siberian State University of Railway Transportation, Novosibirsk, Russia
Cold & Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences, China
National Natural Science Foundation of China, China
International Society for Soil Mechanics and Geotechnical Engineering(ISSMGE), Asia

Sponsored by:
Main Topics including but not limited to the cold regions aspects of:
Mechanical behavior of soil and aggregate
Coupled modeling of mechanical and physical processes
Frost heave and thaw weakening of ballasted subgrade and base of slab track
Field experiments in roadway embankments
Long-term monitoring of subgrade functionality
Non destructive testing of subgrade and aggregate
Dynamic/seismic behavior of transportation infrastructure
Other related topics related to transportation soil engineering in cold regions

Honorary Chair:
Prof. Yuanming Lai, Academician of Science
Prof. Wei Ma, Director of Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
Prof. Askar Zhussupbekov, Vice President for Asia of ISSMGE

The Organizing Committee:
Co-Chairs:
Prof. Erol Tutumluer, University of Illinois at Urbana-Champaign, USA
Prof. Ashpiz E, Moscow State University of Railway Transportation, Russia
Prof. Jiankun Liu, School of civil Engineering, Beijing Jiaotong University, China
Dr. Jianhong Fang, Director of the Qinghai Research Institute for Transportation (QRIT), China
Prof. Zhaohui Yang, Director of Geotechnical and Frozen Soil Engineering Laboratory, School of Engineering, University of Alaska, Anchorage, USA

Committee Members:
Prof. E. Ashpiz, Moscow State University of Railway Transportation, Moscow, Russia
Prof. Broushkov Moscow State University, Russia
Senior Engineer, Dongfeng Chen, Jilin Transportation Research Institute, China
Dr. Xi, Chen, Beijing Jiaotong University, China
Prof. Jiaping Gao, Chang'an University, China
Dr. Jianhong Fang, Director of the Qinghai Research Institute for Transportation (QRIT), China
Prof. Jie Han, University of Kansas, USA
Prof. A. Isakov, Siberian State University of Railway Transportation, Novosibirsk, Russia
Prof. C. H. Juang, Clemson University, USA
Dr. Young-Chin Kim, Korean Institute of Construction, Republic of Korea
Prof. S. Kudliavtsev, Fareast State University of Railway Transportation, Habarovsk, Russia
Prof. V. Kondratiev, Zabaikal State University, Chita, Russia
Prof. Jong-Sub Lee, Korea University, Republic of Korea
Prof. Xianchang Ling, Harbin Institute of Technology, China
Prof. Hoe Ling, Columbia University, USA
Prof. Dongqing Li, Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
Dr. Xu Li, Beijing Jiaotong University, China
Prof. Jiankun Liu, Beijing Jiaotong University, China
Prof. Biao Ma, Chang'an University, China
Prof. Fujun Niu, Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
Prof. Qian Su, School of Civil Engineering, Southwest Jiaotong University, China
Prof. Jilin Qi, Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
Prof. Xu Wang, Lanzhou Jiaotong University, Lanzhou, China
Prof. Yongping Shen, Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
Dr. Yupeng Shen, Beijing Jiaotong University, China
Prof. Yu Sheng, Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
Prof. Erol Tutumluer, University of Illinois at Urbana-Champaign, USA
Dr. Yahu Tian, Beijing Jiaotong University, China
Prof. Lianjun Wang, School of Civil Engineering, Beijing Jiaotong University, China
Prof. Qingbai Wu, Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
Shuangjie Wang, professorate senior engineer, The First Highway Consultants Co., LTD, China
Xinglong, Wang, professorate senior engineer, Heilongjiang Research Institute for Transportation
Dr. Vlasov A, Institute of Geo-ecology, Academy of Russia
Senior Engineer, Zhiwen Xiong, North-west Academy of Railway Science
Prof. Zhaohui Yang, Director of Geotechnical and Frozen Soil Engineering Laboratory, School of Engineering, University of Alaska, Anchorage, USA
Prof. Zurun Yue, Shijiazhuang Railway University, China
Dr. Xiong Zhang, University of Alaska at Fairbanks, USA
Prof. Luxin Zhang, Nort-west Academy of Railway Science
Prof. Qianli Zhang, China Academy of Railway Sciences, China
Prof. Hannele Zubeck, University of Alaska, Anchorage, USA

Secretary:
Dr. Xu Li, Beijing Jiaotong University, E-mail: ceXuLi2012@gmail.com
Dr. Yupeng Shen, Beijing Jiaotong University, E-mail: ypshen@bjtu.edu.cn
Dr. Yahu Tian, Beijing Jiaotong University, E-mail: yhtian@bjtu.edu.cn
Dr. Yu Zhang, Tel:+86- E-mail: zhangyu@mail.lzjtu.edu.cn, (paper submission)

Conference Language: English.

Important dates:
May 15, 2013 Submission of full paper(zhangyu@mail.lzjtu.edu.cn)
May 30, 2013 Notification of the acceptance of submitted paper
June 30, 2013 Deadline for submission of final revised paper (zhangyu@mail.lzjtu.edu.cn)

Keynote speakers (to be confirmed):
Shahuniants Lecture: Distinguished expert from Russia
Prof. Ashpiz, Monitoring system for railroad in cold regions
Prof. Tutumluer, about aggregate study in North America, UIUC
Prof. Zhaohui Yang, about piling in cold region, University of Alaska, Anchorage
Prof. Jie Han, Geotechnical Engineering in Transportation, University of Kansas, USA
Prof. Kondratiev, Subgrade problems in permafrost region and mitigation, Zabaikal State University, Chita, Russia
Prof. Hoe Ling, Columbia University, USA
Dr. Jianhong Fang, Construction of express highway in Qinghai
Prof. Jiankun LIU, Frost Problems of High Speed Railway in Cold region
Dr. Vlasov A, On the fundamental problems in frozen soil mechanics, Institute of Geo-ecology, Academy of Russia

Publication of Conference Papers:
All papers accepted by this symposium will be published in the Journal of Sciences in Cold and Arid Regions, Academy of China, or the Journal of Qinghai Science and Technology in Transportation. Manuscript will be peer reviewed.

Conference Date and Location
Arrival and Registration: October 9
Conference: October 10-11, 2013. Location: Qing Hotel, Xining, China

Field Trip:
Route A: Qinghai Lake and Ta-Er-Si Temple, October 12.
Route B: Xining-Gulmut-Lhasa (optional, pre-registration required), October 13-16