

Transportation Research Congress (TRC)

trc2016beijing@gmail.com Jun 2016, Beijing, China

www.trc-c.org

-The Think Tank for Transportation Innovations

Transportation Research Congress (TRC) is jointly organized by universities, research institutes, industries, and China Highway and Transportation Society. TRC aims at providing an international platform for universities, research institutes, industries, and governments, as well as associations, to incubate, lead, demonstrate and implement innovations, and ultimately evolves into a think tank for transportation innovations. The first TRC conference will mainly cover topics on new ideas, new methodologies, new technologies, new materials, and new equipment, including but not limited to the design and application of new materials, intelligent manufacture and construction, intelligent monitoring, inspection and management, experiments and simulations. Major subject areas include materials, pavements, bridges, tunnels, subgrade and geotechnical, and traffic engineering. Essentially topics across the planning, design, construction, and maintenance processes, and the management and operation of all the highway transportation infrastructure are of the interest of TRC. Example topics include but are not limited to the following:

Alternative Binder and Bioinspired Materials; Materials Recycling; Material Reinforcements; Material Testing; Multiscale Characterization and Modeling; Genome and Material by Design; Multifunctional Materials and Infrastructure; Pavement and Bridge Dynamics; Advanced Sensing and Monitoring; Accelerated Pavement Testing; Drainage and Moisture Damage; Automated Assessment Technology; Energy Harvesting and Green Transportation Infrastructure; Intelligent Compaction and Additive Manufacturing; Environmental Effects on Transportation Infrastructure and Operations; Sustainability and Resilience of Transportation Infrastructure; Ground Improvements; Highway Slope Stability; Big Data Analysis for Transportation Planning and Maintenance; Infrastructure Investment and Management; Autonomous and Connected Vehicles; Logistics; Surface Characterization, Friction, and Safety; Agent–Based Modeling for Complex Systems.

Authors may elect to submit abstracts for both papers and presentations, or paper only, or presentation only. The abstracts will be published in the abstract book. Quality papers, subjected to rigorous peer review and revision process, may be recommended to regular and special issues of journals including.

Frontiers of Structural and Civil Engineering; International Journal of Transportation Science and Technology; International Journal of Pavement Engineering; International Journal of Pavement Research and Technology; International Journal of Road Materials and Pavement Design; ASCE Special Publications.

The first TRC conference will be held from June 6 to June 8, 2016, at China National Convention Center in Beijing, China.

Please submit your abstracts and papers in English by the following deadlines at:

www.trc-c.org

Submission of Abstract. Nov. 11, 2015; Acceptance of Abstract. Nov. 15, 2015; Submission of Full Paper. Jan. 10, 2016; Submission of Final Paper. Feb. 10, 2016;

Sponsors (Alphabetical Order)

Aston University

Case Western Reserve University

Chang'an University

Changsha University of Science and

China Highway and Transportation Society

Chongqing University

Technology

Chongqing Jiaotong University

Dalian University of Science and Technology

Delft University of Technology
Georgia Institute of Technology
Harbin Institute of Technology
National Central University
Oklahoma State University

Pennsylvania State University Research Institute of Highway RWTH Aachen University Southeast University

Southwest Jiaotong University

Tongji University
Tsinghua University
University of Alaska
University of Cambridge
University of Illinois at Urbana

Champaign

University of Science and Technology

Beijing

University of Tennessee

University of Texas at Austin
Virginia Polytechnic Institute and
State University
Washington State University

Wuhan Guangyi Transportation
Science and Technology Incorporated

地下空间运营安全与节能环保节能 专业委员会

Co-Sponsors (Alphabetical Order)

Anhui Transport Consulting & Design Institute Co., Ltd.

Beijing Highway Society
Beijing Jiaotong University
Beijing University of Technology
Frontiers of Structural and Civil
Engineering
Hohai University
International Association of Chinese
Infrastructure Professionals (IACIP)
Inner Mongolia Communications
Design and Research Institute

Yunnan Transportation Research

Institute





trc2016beijing@gmail.com

June 2016, Beijing, China

Advisory	Committee (Alphabetical order)
Xuhong Zhou	(Academician, Professor, President, Chongqing University, Chair)

Imad Al-Qadi (Professor, University of Illinois at Urbana Champaign, Co-Chair) Shouen Fang (Deputy Chancellor, Tongji University, Co-Chair) Jianguo Nie (Academician, Professor, Tsinghua University, Co-Chair) Nanqi Ren (Academician, Vice President, Harbin Institute of Technology, Co-Chair) Aimin Sha (Professor, Vice President, Chang'an University, Co-Chair) (Professor, Vice President, University of Science and Technology Beijing, Co-Chair) Yongsheng Li Dongbai Sun

(Professor, President, Research Institute of Highway, Co-Chair) Jinquan Zhang

Lawrence C. Bank (Professor, The City College of New York) Bjorn Birgisson (Professor, Aston University)

(Professor, Louisiana State University) Steve Cai David Cebon (Professor, University of Cambridge)

> Executive Committee (Alphabetical order)

Aimin Sha (Professor, Vice President, Chang'an University, Chair)

Qingbing Li (Professor, Director of Key National Lab, Tsinghua University, Co-Chair)

Pan Liu (Professor, Dean, Southeast University, Co-Chair)

Wenjie Liu (Secretary General, China Highway & Transportation Society, Co-Chair)

Jian Lu (Professor, Dean, Tongji University, Co-Chair)

Kaimin Niu (Scientific Research Division Chief, Research Institute of Highway, Co-Chair)

Markus Oeser (Professor, RWTH Aachen University, Co-Chair)

Yiqiu Tan (Professor, Associate Dean, Harbin Institute of Technology, Co-Chair)

Linbing Wang(Adjunct Professor, University of Science and Technology Beijing, Co-Chair)

Hehua Zhu (Professor, Tongji University, Co-Chair)

Rongji Cao (Vice President, Jiangsu Transportation Institute)

Huaxin Chen (Professor, Dean, Chang'an University)

Shih-huang Chen (Associate Professor, National Central University)

Shouzhong Feng(President, Wuhan Guangyi Transportation Science and Technology Co., Ltd.) Pingru Dong

Chuan He (Professor, Southwest Jiaotong University)

Baoshan Huang (Professor, University of Tennessee)

Deng-Fong Lin (Professor, I-Shou University)

Jianming Ling (Professor, Associate Dean, Tongji University)

Hanlong Liu (Professor, Dean, Chongqing University)

Rong Luo (Professor, Associate Dean, Wuhan University of Technology)

Guoping Qian (Professor, Associate Dean, Changsha University of Science and Technology)

Erol Tutumluer (Professor, University of Illinois at Urbana-Champaign)

Kelvin Wang (Professor, Oklahoma State University)

Xudong Wang (Chief Scientist, Research Institute of Highway)

Hongru Zhang (Professor, Associate Dean, Beijing Jiaotong University)

Zhanmin Zhang (Professor, University of Texas at Austin)

> Scientific Committee (Alphabetical order)

Jianming Ling(Professor, Associate Dean, Tongji University, Chair) Guojun Cai (Associate Professor, Southeast University, Co-Chair)

Xiangchen Hou(Professor, Dean, Harbin Institute of Technology, Co-Chair)

Hongguang Ji(Professor, Associate Dean, University of Science & Technology Beijing, Co-Chair)

Jenny Liu (Professor, University of Alaska, Co-Chair)

Yanjun Qiu (Professor, Director, Southwest Jiaotong University, Co-Chair)

Hainian Wang(Professor, Associate Dean, Chang'an University, Co-Chair)

Peivu Yan (Professor, Director, Tsinghua University, Co-Chair)

Andrew F. Braham(Assistant Professor, University of Arkansas)

Liping Cao (Associate Professor, Harbin Institute of Technology)

Karim Chatti (Professor, Michigan State University)

Jian-Shiuh Chen(Professor, National Cheng-Kung University)

Jun Chen (Associate Professor, Hohai University)

Zhouxiang Ding(Associate Professor, Beijing Jiaotong University)

Yingwu Fang (Virginia Department of Transportation)

Decheng Feng(Professor, Harbin Institute of Technology)

(Professor, Chang'an University) Zhen Fu

(Professor, Harbin Institute of Technology) Anxin Guo

Jianhua Guo (Professor, Harbin Institute of Technology)

Jie Han (Professor, University of Kansas)

(Associate Professor, Chongqing Jiaotong University) Liang He (Associate Professor, Chang'an University) Rui He

(Assistant Professor, Shandong University) Yue Hou Zhiyi Huang (Professor, Zhejiang University)

(Professor, Beijing University of Civil Engineering and Architure) Jie Ji

Yujun Cui (Professor, ENPC) (Professor, Vice President, Transport Planning and Research Institute) Boming Tang Changvu Guan

Zhongyin Guo (Professor, Tongji University) John Harvey (Professor, University of California, Davis)

Xiaoming Huang (Professor, Southeast University) (Professor, North Carolina State University) Richard Kim

(Professor, Tongji University) Andreas Loizos (Professor, National Technical University of Athens/N.T.U.A)

Manfred N. Partl (Professor, KTH Royal Institute of Technology) Tom Scarpas (Professor, Delft University of Technology)

Chuck Schwartz (Professor, University of Maryland) Bernhard Steinauer (Professor, RWTH Aachen University)

> Organizing Committee (Alphabetical order)

Yiqiu Tan (Professor, Associate Dean, Harbin Institute of Technology, Chair) Dongwei Cao (Vice Director, Research Institute of Highway, Co-Chair) (Professor, Department Head, Tongji University, Co-Chair) Wengi Ding (Professor, Associate Dean, Southeast University, Co-Chair) Xinvu Gu Liqun Hu (Professor, Director, Chang'an University, Co-Chair) (Professor, Director, University of Science and Technology Beijing, Co-Chair) Shane Underwood(Assistant Professor, Arizona State University) Ying Jin

(Associate Professor, Washington State University, Co-Chair) Haifang Wen

(Associate Professor, Tsinghua University, Co-Chair) Hongduo Zhao(Professor, Department Head, Tongji University, Co-Chair)

Montasir Abbas (Professor, Virginia Tech)

Amit Bhasin (Associate Professor, the University of Texas at Austin)

Jingvun Chen (Professor, Associate Dean, Dalian University of Technology) Suren Chen (Associate Professor, Colorado State University)

(Vice President, Anhui Transport Consulting & Design Institute Co., Ltd.) Xiuhe Chen

(Associate Professor, Tongji University) Danhui Dan

(Secretary General, Beijing Highway Society) Zejiao Dong (Professor, Harbin Institute of Technology)

Elham H. Fini (Associate Professor, North Carolina A&T State University) (Vice Director, Research Institute of Highway) Yufang Fu

Jingyan Gu (Professor, Director, Research Institute of Highway)

Feng Guo (Professor, Virginia Tech) M. Emin Kutay(Associate Professor, Michigan State University)

Chengming Lan(Associate Research Fellow, University of Science and Technology Beijing)

Xinjun Lee (Research Scientist, Federal Highway Administration)

Hui Li (Professor, Tongji University) Deng-Fong Lin(Professor, I-Shou University)

Hao Liu (Beijing Municipal Road & Bridge Building Material Group Co., Ltd.)

(Professor, Shandong University) Shutang Lin

Xingrong Liu (Professor, Director, Chongqing University) Xuevan Liu (Technological University of Delft)

Yinghao Miao(Associate Professor, Beijing University of Technology)

Linhua Jiang (Professor, Dean, Hohai University)

Yong-Rak Kim(Associate Professor, University of Nebraska)

Nicole Kringos(Associate Professor, KTH Royal Institute of Technology)

Zhen Leng (Associate Professor, Hongkong University of Science and Technology) Xiaojun Li (Professor, Tongji University)

Tianging Ling(Professor, Dean, Chongqing Jiaotong University)

Xianzhang Ling(Professor, Harbin Institute of Technology) (Professor, Xi'an University of Architecture and Technology) Li Liu

Tingjin Liu (Associate Professor, South China University of Technology) Gao Lu (Assistant Professor, University of Houston)

Qing Lu (Professor, Southeast University)

(Assistant Professor, Boise State University) Yang Lu Feng Ma (Associate Professor, Chang'an University) Tao Ma (Associate Professor, Southeast University)

Bo Peng (Research Associate, Stanford University) Zhendong Qian(Professor, Southeast University)

Livan Shan (Associate Professor, Harbin Institute of Technology)

Shihui Shen (Associate Professor, Pennsylvania State University) Shuilong Shen(Professor, Department Head, Shanghai Jiao Tong University)

Yanping Sheng(Professor, Chang'an University)

Xianming Shi (Associate Professor, Washington State University)

Wenjuan Sun (Research Associate, Virginia Tech)

Yongming Sun(Assistant Professor, Harbin Institute of Technology) Mingliang Tao(Associate Professor, Worcester Polytechnic Institute)

Huizhao Tu (Associate Professor, Tongji University)

Lijun Sun (Professor, Tongji University)

(Professor, President, Chongqing Jiaotong University)

(Professor, Zhenzhou University)

(Professor, Vice President, CCCC First Highway Consultants Co., LTD.)

(Professor, Dean, Southeast University)

(Professor, Changsha University of Science and Technology) Qisen Zhang Xiaoning Zhang (Professor, South China University of Technology)

Zhongjie Zhang (Research Administrator, Louisiana State University)

(Professor, Institute of Mechanics, Chinese Academy of Sciences) (Professor, Changsha University of Science and Technology)

(Chief Engineer, Ministry of Transportation)

(Professor, President, Nanchang University)

Chuangbing Zhou Guoqing Zhou (Professor, Vice President, Guilin University of Technology)

Cristopher D. Moen(Associate Professor, Virginia Tech) Ernian Pan (Professor, The University of Akron)

Fuming Wang

Wei Wang

Yapu Zhao

Wei Zhou

Jianlong Zheng

Shuangiie Wang

(Professor, University of California, Irvine) Lizhi Sun Bo Tian (Research Fellow, Research Institute of Highway)

Hani Titi (Associate Professor, University of Wisconsin-Milwaukee)

Cheng Wan (Associate Research Fellow, Guangxi University)

Dapeng Wang(Director, China Highway & Transportation Society) Dawei Wang (Research Scientist, University of Aachen)

Hao Wang (Assistant Professor, Rutgers University) Yuhong Wang(Associate Professor, The Hong Kong Polytechnic University)

Yunpeng Wang(Professor, Dean, Beihang University)

(District Materials Engineer, Virginia Department of Transportation) Chung Wu

Feipeng Xiao (Professor, Tongji University)

(Associate Professor, Pennsylvania State University) Ming Xiao

(Senior Engineer, Director, Inner Mongolia Communications Design and Research Institute) Qiang Xin

Huining Xu (Associate Professor, Harbin Institute of Technology) Yuyou Yang (Assistant Professor, China University of Geosciences)

Zhongxuan Yang(Professor, Zhejiang University)

Huimin Vin (Associate Professor, Columbia University)

Xiong Yu (Professor, Case Western Reserve University)

Lei Zhang (Associate Research Fellow, Research Institute of Highway) Lianzhen Zhang(Associate Professor, Harbin Institute of Technology)

Yunlong Zhang(Associate Professor, Associate Department Head, Texas A&M university)

Bin Zhou (Senior Engineer, Yunnan Transportation Research Institute) Fujie Zhou (Research Scientist, Texas A&M Transportation Institute)

Jianting Zhou (Professor, Deputy Director, Research Institute of Highway)

Ronggui Zhou (Professor, Director, Research Institute of Highway) Hongzhou Zhu(Professor, Dean, Chongqing Jiaotong University)

Xingvi Zhu (Associate Research Fellow, Tongji University)

Bo Wang (Associate Professor, Southwest Jiaotong University)

Duanyi Wang (Professor, Deputy Director, South China University of Technology)

Jian Wang (Professor, Harbin Institute of Technology)

Jianhua Wang(Professor, Shanghai Jiao Tong University) Lin Wang (Chief engineer, Shandong Communications Science Research Institute)

Yaqiong Wang(Associate Professor, Chang'an University)

Haocheng Xiong(Research Associate, Virginia Tech)

Hongxia Xiong(Associate Professor, Wuhan University of Technology)

Qianwei Xu (Associate Professor, Tongji University)

(Associate Professor, South China University of Technology) Wei Xu Wenjing Xue (Research Associate, Virginia Tech)

(Professor, Southeast University) Jun Yang Fei Ye (Associate Professor, Chang'an University)

Guanlin Ye (Associate Professor, Shanghai Jiao Tong University) Zhanping You(Professor, Michigan Technological University)

(Associate Research Fellow, Southeast University) Bin Yu Xin Yu (Professor, Hohai University)

Xiangiuan Yu(Professor, Hohai University) Jie Yuan (Associate Professor, Tongii University)

Zhongqi Yue (Professor, The University of Hong Kong)

Haiyan Zhang(Associate Research Fellow, Research Institute of Highway) Lei Zhang (Assistant Professor, Harbin Institute of Technology)

Mingming Zhang(Assistant Professor, Chang'an University) Xiong Zhang (Associate Professor, University of Alaska)

Yinning Zhang(Research Associate, Virginia Tech)