International Workshop on Base for Introducing Talents of Civil

Engineering Discipline

——International Workshop on High-performance Wind Energy System and Effective Operation of Wind Farms (HPWES) and Mitigating Wind-induced Disaster of Wind-sensitive Infrastructure (MWDWSI)

(October 18-19, 2018, Chongqing, China)

Sponsored by:

Base for Introducing Talents of Discipline to University on High-performance Wind Energy System and Effective Operation (Chongqing University)

Base for Introducing Talents of Discipline to University on Wind-sensitive Infrastructure and Wind-induced disaster mitigation (Beijing Jiaotong University)

School of Civil Engineering, Chongqing University

Organized by:

Journal of Building Structure

Supported by:

Department of Science, Education, Culture and Health Experts, State Bureau of Foreign Experts Affairs

Key Dates:

Sign-up: September 27, 2018 Registration: October 19, 2018 Conference: October 20-22, 2018

Venue:

Chongqing Empark Grand Hotel

Address: (No.1, 2nd Branch, Jianxin North Road, Jiangbei District, Chongqing, China)

1. Brief Introduction

To advance the process of promoting Chinese colleges and universities to be world-class, "plan of innovation and intelligence-importing for some disciplines of Chinese colleges and universities (Plan 111)" has been jointly organized by Ministry of Education and State Administration of Foreign Experts Affairs since 2006. The plan will establish some disciplines frontiers with strong innovation ability, and upgrade the scientific renewal and peers competition of Chinese universities. Based on the annual academic meeting of Base for Introducing Talents of Discipline to University on High-performance Wind Energy System and Effective Operation (HPWES) and Base for Introducing Talents of Discipline to University on Wind-sensitive Infrastructure and Wind-induced disaster mitigation (MWDWSI), International Workshop on Base for Introducing Talents of Civil Engineering Discipline invites the domestic and foreign high-level experts to exchange the latest academic progresses. The theme of this forum involves characteristics of extreme winds, bluff body aerodynamics, Computational Fluid Dynamics (CFD), wind-resistant design of large-scale structures such as long-span structures and high-rise buildings, conditional assessment and health monitoring for wind sensitive structures, Wind resources assessment and wind power forecast, new high-performance structure of wind turbine, and disaster-resistant performance of large-scale wind power facilities under extreme conditions. Researchers and students in universities and research centers and research and educational institutes, relevant engineers and governors are all very welcome to join the forum.

2. Keynote Lectures

Oct. 18th

| Time | Speaker | Position / Company | Presentation | | | |
|---|--|--|--|--|--|--|
| 8:30-9:00 | pening Ceremony | | | | | |
| Session Chairman: Bo Yang | | | | | | |
| 09:00-09:25 | Theodore Stathopoulos | Concordia University | Urban Wind Energy | | | |
| 09:25-09:50 | Kishor Mehta | Texas Tech University | Technical Challenges in Wind Farm | | | |
| 09:50-10:10 | Group Photo + Tea Break | | | | | |
| Session Chairman: Theodore Stathopoulos | | | | | | |
| 10:10-10:35 | Y. Tamura | Chongging University | Aerodynamic and response characteristics of super-tabuildings with various configurations | | | |
| 10:35-11:00 | Ahsan Kareem | University of Notre Dame | Model-based and data-driven stochastic simulation of wind effects | | | |
| 11:00-11:25 | Ji-Jian Lian | Tianjin University | New Foundation structure, installation technology an equipment for offshore wind turbine | | | |
| 11:25-11:50 | You-Lin Xu | Hong Kong Polytechnic University | Optimal variable pitch for high-solidity straight-blade vertical wind turbines | | | |
| | | Chrycisity | vertical wind turbines | | | |
| | | Lunch | | | | |
| | | • | Break | | | |
| 14:00-14:25 | Giovanni Solari | Lunch | Break n: Ahsan Kareem | | | |
| 14:00-14:25 14:25-14:50 | | Lunch Session Chairman | Break n: Ahsan Kareem | | | |
| | Solari Richard George James | Lunch Session Chairman University of Genova The University of | Break n: Ahsan Kareem Dynamic response of structures to thunderstorm outflows Advanced wind turbine research at the University of | | | |
| 14:25-14:50 | Solari Richard George James Flay Zhong-Dong | Lunch Session Chairman University of Genova The University of Auckland Harbin Institute of Technology | Break n: Ahsan Kareem Dynamic response of structures to thunderstorm outflow Advanced wind turbine research at the University of Auckland | | | |
| 14:25-14:50 14:50-15:15 | Solari Richard George James Flay Zhong-Dong Duan Kenny C S | Lunch Session Chairman University of Genova The University of Auckland Harbin Institute of Technology | Break Dynamic response of structures to thunderstorm outflow Advanced wind turbine research at the University of Auckland Typhoon Wind Hazard Under Climate Change High-performance wind energy system for buildings in a | | | |
| 14:25-14:50 14:50-15:15 15:15-15:40 | Solari Richard George James Flay Zhong-Dong Duan Kenny C S | Lunch Session Chairman University of Genova The University of Auckland Harbin Institute of Technology | Break Dynamic response of structures to thunderstorm outflow Advanced wind turbine research at the University of Auckland Typhoon Wind Hazard Under Climate Change High-performance wind energy system for buildings in a urban environment Tea Break | | | |
| 14:25-14:50 14:50-15:15 15:15-15:40 | Solari Richard George James Flay Zhong-Dong Duan Kenny C S | Lunch Session Chairman University of Genova The University of Auckland Harbin Institute of Technology The University of Sydney Session Chairm Hong Kong Polytechnic | Break Dynamic response of structures to thunderstorm outflow Advanced wind turbine research at the University of Auckland Typhoon Wind Hazard Under Climate Change High-performance wind energy system for buildings in a urban environment Tea Break | | | |

| 16:45-17:10 | Yong Chul, Kim | Tokyo Polytechnic University | Wind-induced vibrations of solar wing system under various wind environments |
|-------------|-------------------|---------------------------------|--|
| 17:10-17:35 | Xin-Zhong Chen | Texas Tech University | Wind load effects of tall buildings: Inelastic response and base isolation |

Oct. 19th

| Time | Speaker | Position / Company | Lecture Theme | | |
|-----------------------------------|------------------------------|---|---|--|--|
| | | Session Chairman: Chai | ralampos Baniotopoulos | | |
| 08:30-08:55 | Billie F. Spencer, Jr. | University of Illinois at Urbana-Champaign | Topology Optimization for Stochastically Excited Structures | | |
| 08:55-09:20 | Qing-Shan Yang | Chongqing University | Main Contents of the Wind Load Standard of Roof Structures | | |
| 09:20-09:45 | Soon-Duck Kwon | Chonbuk National University | Blockage corrections for wind tunnel tests of vertical axis wind turbines | | |
| 09:45-10:10 | Dai Zhou | Shanghai Jiaotong University | Offshore Wind Turbine and Floating Vertical Axis Wind Turbine Structural System | | |
| 10:10-10:25 | Tea Break | | | | |
| Session Chairman: Giovanni Solari | | | | | |
| 10:25-10:50 | Kincho H. Law | Stanford University | Optimization of Wind Farm Layout for Maximizing Wind Farm Power Production | | |
| 10:50-11:15 | Yoshida Akihito | Tokyo Polytechnic University | Wind resistance performance and wind-induced damage of inflatable amusement products | | |
| 11:15-11:40 | Guo-Qing Huang | Chongqing University | Non-stationary winds and wind load effects | | |
| 11:40-12:05 | Qiu-Sheng Li | City University of Hong Kong | Observations of wind characteristics and wind effects on super-tall buildings during super typhoon Mangkhut | | |
| | | Lunch | Break | | |
| | | Session Chairman: | Billie F. Spencer, Jr. | | |
| 14:00-14:25 | Charalampos Baniotopoulos | University of Birmingham | On the Assessment of High Performance Wind Turbine Towers by means of Sustainability Criteria | | |
| 14:25-14:50 | Xin-Qun Zhu | University of Technology Sydney | Condition assessment of heritage timber buildings in operational environments | | |
| 14:50-15:15 | Na Yang | Beijing Jiaotong University | Experimental investigation for the fatigue performance and damage estimation of screw-fastened light-gauge-steel sheets | | |
| 15:15-15:40 | Horia Hangan | University of Western Ontario | New experiments for wind energy applications | | |

| 15:40-15:55 | Tea Break | | | | |
|----------------------------------|----------------------|---------------------------------|--|--|--|
| Session Chairman: Qing-Shan Yang | | | | | |
| 15:55-16:20 | Giuseppe Piccardo | University of Genova | Energy production and structural behaviour of small size wind turbines in urban environment | | |
| 16:20-16:45 | Feng Xu | Beijing Jiaotong University | Large-scale simulation of buoyancy induced flows on a roof | | |
| 16:45-17:10 | Yingli Xuan | Tokyo Polytechnic University | Verification of nonphysical attenuation of artificially generated inflow turbulence based on Lattice Boltzmann Method with a LES | | |
| 17:10-17:35 | Jakob Mann | Technical University of Denmark | Lidars for research and control of wind turbines | | |

3. Registration

- (1) **Registration Fee:** 2000 RMB/person (including collection of keynote lectures, meals, tea break, **site** fee and attendance fee etc.)
- (2) Registration: please visit the official website: www.buildingstructure.cn, download and fill out the meeting receipt in the left bulletin board, see the attachment, and send it to: jzjg2016@qq.com before September 27, 2018. The organization committee will reply within 3 working days. If no reply is received, please contact the organization committee.

(3) Payment:

Payee name: Asia-Pacific Institute of Construction Scitech Information Co., Ltd.;

Bank name: East Sanhuan Sub-branch, Beijing, China Merchants Bank

Bank Account number: 110908001310606;

Bank Address: No.1 East Sanhuan North Road, Chaoyang District, Beijing China

Swift: CMBCCNBS

Remittance message: HPWES + "Participant's name"

Reminder: Please try to use the bank remittance (counter transfer, online bank and mobile bank), we suggest not to use Ali-pay remittance (due to Ali-pay system will cause incomplete remittance information to delay entry and invoice issuing).

(4) Conference Venue: EMPARK GRAND HOTEL (No.1, 2nd branch, Jianxin North Road, Jiangbei District, Chongqing), large-bed room and standard room are 450 RMB / room / day (breakfast included). The accommodation fee will be paid directly to the hotel after the registration on conference site, and cost of accommodation will be covered by the attendance. The participants can also book their own accommodation at other hotels.

4. Contact Information

Journal of Building Structure

Qiong Wu: 010-57368787 (Registration inquiry);

Na Li: 010-57368783, 15801601545 (Conference affairs and business promotion);

Bin Wang: 010-57368786, 18500192668 (Conference affairs and business promotion);

Fax: 010-57368781; Email: jzjg2016@qq.com (registration only);

Website: www.valdingstructure.cn.

Chongqing University²⁰⁷⁸

Bowen Yan: 15683789537 (Conference consultation)