# The 18th International Advanced School on Wind Engineering (IAS18)

## August 21-22, 2021

#### **Sponsors:**

- Base for Innovations of Discipline to University on High-performance Wind Energy System and Effective Operation, Chongqing University
- Base for Innovations of Discipline to University on Mitigating Wind-induced Disaster of Wind-sensitive Infrastructures, Beijing Jiaotong University
- Joint Usage Research Center, Wind Engineering Research Center, Tokyo Polytechnic University
- Universiti Malaysia Pahang

#### **Organizer:**

- Chongqing's Key Laboratory of Wind Engineering and Wind Resources Utilization, School of Civil Engineering, Chongqing University

#### 1. Aims and Scope

Wind engineering is an important research area in the field of civil engineering. The 18th international advanced school on wind engineering, which is initiated and presided over by Prof. Yukio Tamura, Academician of Japan and China Academy of Engineering (JAE, CAE), and former chairman of International Association of Wind Engineering (IAWE), honorary Professor of Tokyo Polytechnic University and Professor of Chongqing University, will be held online from August 21 to 22, 2021. The course covers wind flow characteristics, buildings and bridges aerodynamics under stationary and non-stationary strong winds, equivalent wind loads and wind-induced responses, the wind tunnel techniques, Computational fluid dynamics (CFD) and its applications in wind engineering, introduction of wind load codes, offshore wind energy potential, and offshore floating wind turbines under the interaction of wind-wave-current.

Researchers and students in the universities and research institutions, relevant engineers and government employees are all greatly welcome to join the IAS18.

#### 2. Lecturers



Prof. S.Y. Cao

**Prof. M. Sterling** 

Prof. H. Hemida

Prof. B. Blocken





Prof. R. Hoeffer

## 3. Course Schedule

#### DAY 01 August 21, 2021

Beijing Time	Lecture Title	Lecturer	Remarks
9:00 - 9:50	Bluff body aerodynamics	Prof. R. Flay	Univ. of Auckland
10:00 - 10:50	Along-wind gust factor approach		New Zealand
11:00 - 11:50	Wind-induced vibrations of structures with	Prof. K.C.S. Kwok	Sydney Univ.
	special reference to tall buildings		Australia
14:00 -14:50	Computational wind engineering for pedestrian-	Prof. B. Blocken	Eindhoven Univ. of Tech.
	level wind comfort around buildings		The Netherlands
15:00 - 15:50	Non-stationary winds	Prof. M. Sterling	Univ. of Birmingham
			<b>United Kingdom</b>
16:00 - 16:50	Characteristics of Atmospheric Boundary Layer	Prof. H. Hemida	Univ. of Birmingham
17:00 - 17:50	Simulations of Atmospheric Boundary Layer		United Kingdom

### DAY 02 August 22, 2021

Beijing Time	Lecture Title	Lecturer	Remarks
09:00 - 09:50	CFD Applications in structural wind engineering problems	Prof. S.Y. Cao	Tongji Univ. China
10:00 - 10:50	Vortex-induced vibration of long-span bridges with twin-box decks	Prof. Y.L. Xu	Hong Kong Poly. Univ. Hong Kong, China
11:00 - 11:50	Damping for wind resistant design of buildings	Prof. Y. Tamura	Chongqing Univ. China
14:00 - 14:50	Update of the European Standard EN 1991-1-4 "Wind Actions" (Part 1) Extended wind load modelling	Duef D. Heeffer	Ruhr Univ.,
15:00 - 15:50	Update of the European Standard EN 1991-1-4 "Wind Actions" (Part 2) Extended response calculations	Prof. R. Hoeffer	Germany
16:00 - 16:50 17:00 - 17:50	Offshore wind energy potential Wind-wave-structure interaction phenomena in off-shore wind energy structures	Prof. C. Borri	Univ. of Firenze, Italy

## 5. Registration

Please visit the registration link at: http://ias18-2021.mikecrm.com/NdhtXvc

Deadline of registration is August 18th. The organization committee will confirm your registration within 2 working days prior to the start of the conference. If you do not receive a reply, please contact the organization committee.

To ensure that you get the online zoom link and reminders, please correctly fill your email address in the registration form.

## 6. Organization Committee

Chairmen of the Organization Committee



Honorary Chairman Prof. Y. Tamura



Chairman Prof. Q.S. Yang



Executive Chairman Prof. G.Q. Huang

Members of the Organization Committee



## 7. Contact Information

Phone: +86 15683789537 (Bowen Yan) ;+86 18996087236 (Zhishan Mo) Email: yanbowen89@163.com (for registration only)

