



UNIVERSITY OF
BIRMINGHAM

The 21st International Advanced School on Wind Engineering (IAS 21)

Sponsored by “Base for Innovations of Discipline to University on High-performance Wind Energy System and Effective Operation” Chongqing University

School of Engineering, University of Birmingham, UK

August 3 - 4, 2024

AIMS AND SCOPE

It has been reported that most economic losses due to natural disasters in the world have been caused by extreme wind related events, and it is hypothesized that global warming has the potential to further exacerbate this scenario through an increase in the number of weather-related devastating disasters. Buildings and structures are densely constructed in urban areas, and are becoming taller and slenderer, and thus more vulnerable to wind. As a result, wind engineering research and education are becoming increasingly important. However, some universities have only a few curriculums in the wind engineering field. In addition, students, young researchers, and engineers in the world rarely have an opportunity to take top level lectures by world eminent wind engineers and professors. The International Advanced School (IAS) on Wind Engineering was inaugurated by Prof. Yukio Tamura of Tokyo Polytechnic University in 2006 to cover this lack of relevant advanced professional training.

The lectures in the IAS 21 will deal with structural wind engineering issues and provide state-of-the-art scientific knowledge and the latest technical information in these areas. The IAS21 also provides the opportunity for direct contacts with world eminent researchers in the various areas of wind engineering for young students and engineers in Italy and other countries, and will be of great interest to students, engineers, and researchers who work in the wind engineering field and the building construction industry.

ORGANIZING CHAIR: Qingshan Yang (Chongqing University)

HOSTING CHAIRS: Hassan Hemida (University of Birmingham)

FOUNDING CHAIR: Yukio Tamura (Chongqing University)



Organizing Chair
Qingshan Yang



Hosting Chair
Hassan Hemida



Founding Chair
Yukio Tamura

SUPPORTED BY:

Chongqing University, China

- Base for Innovations of Discipline to University on High-performance Wind Energy System and Effective Operation
- Chongqing's Key Laboratory of Wind Engineering and Wind Resources Utilization, School of Civil Engineering

University of Birmingham, UK

Tokyo Polytechnic University, Japan

Beijing Jiaotong University, China

- Base for Innovations of Discipline to University on Mitigating Wind-induced Disaster of Wind-sensitive Infrastructures

LECTURERS



Shuyang Cao
Tongji Univ.



Ahsan Kareem
Univ. of Notre Dame



Greg Kopp
Western Univ.



Kenny C.S. Kwok
Univ. of Sydney



Hassan Hemida
Univ. of Birmingham



Rüdiger Hoeffler
Ruhr Univ.



Ted Stathopoulos
Concordia Univ.



Mark Sterling
Manchester Met. Univ.



Yukio Tamura
Chongqing Univ.



You-Lin Xu
Southwest J. Univ.



Qingshan Yang
Chongqing Univ.

COURSE SCHEDULE

AUGUST 3, 2024

Time	Lecturer	Topic
09:00 - 09:40	Registration	
09:40 - 09:50	Q.S. Yang	Opening Address
10:00 - 10:50	M. Sterling	Flow over natural canopies
11:00 - 11:50	A. Kareem	Dynamic response of structures to non-stationary winds: Generalized wind loading chain
11:50 - 13:00	Lunch	
13:00 - 13:50	G. Kopp	The partial-turbulence-simulation wind-tunnel method for determining aerodynamic loads on components and cladding
14:00 - 14:50	K. Kwok	Adverse effects of wind-induced building motion on occupants
15:00 - 15:50	T. Stathopoulos	Wind effects on buildings and their environment: Codification and standardization

AUGUST 4, 2024

Time	Lecturer	Topic
09:00 - 09:50	H. Hemida	Atmospheric boundary layer for wind engineering applications
10:00 - 10:50	S.Y. Cao	Numerical prediction of wind-induced response of structures during typhoon landing process
11:00 - 11:50	Y.L. Xu	Establishment and application of digital twins for vortex-induced vibration of long span bridges
11:50 - 13:00	Lunch	
13:00 - 13:50	Y. Tamura	Damping in buildings for wind resistant design
14:00 - 14:50	R. Hoeffler	New standardized methods for the determination of wind-induced vibrations according to the future Eurocode 1
15:00 - 15:50	Q.S. Yang	Code for wind-resistant design of roof structures in China
15:50 - 16:00	H. Hemida	Closing address
16:00 - 16:10	Distribution of Certificates	

VENUE (School of Engineering, University of Birmingham)

Room 127, Engineering Building, University of Birmingham, Edgbaston, Birmingham

REGISTRATION

Registration should be through the BBAA9 conference website <https://uobevents.eventsair.com/bbaa-ix/> and choose the IAS registration: <https://uobevents.eventsair.com/bbaa-ix/bbaa-ix-registration/Site/Register>

*Registration portal is not the same as abstract submission. Two different registrations are required.

Registration fees (VAT 20% included): £120

Registration fee includes:

2 light lunches for attendees, 4 coffee breaks, certificates for IAS attendees, lecture notes printing (or others)

Closing of Registration: 20th July 2024

CANCELLATION POLICY

Cancellations should be notified to the Secretariat in writing only. Registration fees less than 25% of administrative charges will be refunded if the cancellation is made before June 28, 2024. After this date, no refund will be possible. Refunds will be processed and issued 60 days after receiving cancellation.

SECRETARIAT



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PAST INTERNATIONAL ADVANCED SCHOOL

IAS	Dates	Location	Chair
IAS 21	August 3-4, 2024	Birmingham, UK	Q.S. Yang, H. Hemida, Y. Tamura
IAS 20	May 27-28, 2024	Chongqing, CHINA	Q.S. Yang, Y. Tamura
IAS 19	September 1 - 2, 2023	Florence, ITALY	Q.S. Yang, C. Borri, G. Bartoli, Y. Tamura
IAS 18	August 21 - 22, 2021	ONLINE	Q.S. Yang, Y. Tamura
IAS 17	August 30 - September 1, 2019	Beijing, CHINA	Q.S. Yang, Y. Tamura
IAS 16	October 20 - 22, 2018	Chongqing, CHINA	Q.S. Yang, Y. Tamura
IAS 15	October 16 - 18, 2017	Chongqing, CHINA	Q.S. Yang, Y. Tamura
IAS 14	January 13, 2017	Kuantan, MALAYSIA	M.I. Ali, N. I. Ramli
IAS 13	October 10 - 12, 2016	Beijing, CHINA	Q.S. Yang, Y. Tamura
IAS 12	June 29 - July 1, 2015	Porto Alegre, BRAZIL	Q.S. Yang, A.L. Souza, Y. Tamura
IAS 11	March 13 - 14, 2014	Taipei, TAIWAN CHINA	C.M. Cheng
IAS 10	February 10 - 12, 2014	Kuantan, Malaysia;	M.I. Ali, N. I. Ramli
IAS 9	August 13 - 16, 2012	Manila, PHILIPPINES	B.M. Pacheco, Y. Tamura
IAS 8	November 14 - 18, 2011	Hong Kong, CHINA	Y.L. Xu, K.T. Tse, Y. Tamura
IAS 7	December 6 - 8, 2010	New Delhi, INDIA	P. Krishna, Y. Tamura
IAS 6	August 31 - September 4, 2009	Beijing, CHINA	Y. Tamura
IAS 5	March 23 - 25, 2009	Opole, POLAND	T. Chmielewski, Y. Tamura
IAS 4	December 6 - 8, 2007	Seoul, KOREA	Y. Tamura
IAS 3	November 21 - 23, 2007	Shanghai, CHINA	Y.J. Ge, Y. Tamura
IAS 2	March 5 - 9, 2007	Tokyo, JAPAN	Y. Tamura
IAS 1	July 14 - 15, 2006	Atsugi, JAPAN	Y. Tamura