

Wind Engineering Joint Usage / Research Center, Tokyo Polytechnic University  
**International Workshop on Wind Effects on Buildings and Urban Environment**  
Subtitle: Highlights of 6 Year's Collaborative Activities

## General Information

Date	March 10 ~ 12, 2019
Venue	Atsugi Campus, Tokyo Polytechnic University
Organized by	Wind Engineering Joint Usage / Research Center, Tokyo Polytechnic University
Co-organized by	Japan Association for Wind Engineering
Supported by	The Society of Heating, Air-Conditioning and Sanitary Engineers of Japan The Meteorological Society of Japan Architectural Institute of Japan Japan Society of Civil Engineering

## Introduction / Objectives

Wind Engineering Research Center at Tokyo Polytechnic University (WERC-TPU) was adopted as the Wind Engineering Joint Usage / Research Center (WE-JURC) by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in 2013. During last 6 years, we have been conducting many joint international and domestic researches actively using our experimental facilities and virtual database, and now we are planning to hold the 2<sup>nd</sup> international workshop to summarize the research activities for last 6 years. We have collaborated more than 22 foreign institutes in Canada, China, Taiwan, Hong Kong and so on, and 32 domestic institutes, contributing to the establishment of the Japanese Enhanced Fujita Scale in 2016 and publication of the Manual of Wind Resistant Design for Photovoltaic System in 2017.

In this workshop, for a better understanding both of structural and environmental wind engineering by exchanging and sharing of the latest information, knowledge and achievements, transdisciplinary sessions from structural and environmental fields will be provided, as well as independent general sessions from structural and environmental wind engineering for the topics shown below, but are not limited to.

## Topics

<< Transdisciplinary Sessions >>

- 1) Transdisciplinary topics on meteorology and wind engineering
  - Climate change/Global warming, Urban thermal environment, Urban wind effect, Pollutant dispersion
- 2) Transdisciplinary topics on structural and environmental wind engineering
  - Façade engineering, Pressure coefficient, Internal and external pressure
  - PIV, Evaluation of fluctuating wind speed
  - CFD in structural and environmental wind engineering
- 3) Full-scale simulation
  - Alternative use of full-scale simulator from environmental wind engineering to the full-scale measurement

<< General Session >>

1) Structural Wind Engineering

- Damage and disaster by extreme wind, downburst, tornado
- Bluff body aerodynamics and dynamic characteristics

2) Environmental Wind Engineering

- Ventilation in buildings and urban areas
- Human thermal comfort
- Thermal/wind environment in indoor/neighborhood/urban scale
- Energy saving of building by using natural energy

- SDGs: (7) Sustainable energy for all, (11) Sustainable cities and communities, (13) Action on climate change



### Keynote Speakers

- Structural wind engineering: Professor G. Solari (University of Genoa, Italy)

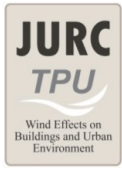
Title: Detection, simulation, modelling and loading of thunderstorm outflows to design wind-safer and cost-efficient structures

- Environmental wind engineering: Professor Y. Li (Hong Kong University, Hong Kong)

Title: Heat dome and urban warming

### Organized Session

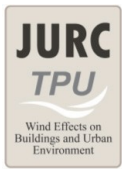
- Structural wind engineering: Professor H. Hangan (Western University) (Currently confirming)
- Environmental wind engineering: Organized session (Currently confirming)



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**Timetable**

Time	3/10 (Sunday)	Time	3/11 (Monday)	Time	3/12 (Tuesday)
		9:20 ~ 9:30	Opening Address		
		9:30 ~ 10:30	General Report of 6 Year's Collaborative Activity	9:30 ~ 10:20	Keynote Session II
		10:30 ~ 10:40	Coffee Break	10:20 ~ 10:30	Coffee Break
		10:40 ~ 11:30	Keynote Session I	10:30 ~ 11:50	Transdisciplinary Session III
		11:30 ~ 13:00	Group Photo Lunch	11:50 ~ 13:00	Lunch
		13:00 ~ 14:20	Transdisciplinary Session I	13:00 ~ 14:20	General Session III
		14:20 ~ 14:30	Coffee Break	14:20 ~ 14:30	Coffee Break
		14:30 ~ 15:50	General Session I	14:30 ~ 15:50	General Session II
16:00 ~ 17:30	Technical Tour (TPU)	15:50 ~ 16:00	Coffee Break	15:50 ~ 16:00	Closing Address
17:30 ~ 19:00	Icebreaker Reception (TPU)	16:00 ~ 17:20	Transdisciplinary Session II	16:10 ~	JURC Steering Committee (Closed)
		17:40 ~	Dinner (TPU, Student Restaurant)		



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### Organizing Committee

- Y. Tamura, Program Coordinator of WE-JURC, Professor Emeritus of Tokyo Polytechnic University,  
Professor of Chongqing University
- R. Yoshie, President of Tokyo Polytechnic University
- M. Matsui, Director of WERC, Professor of Tokyo Polytechnic University
- Y. C. Kim, Associate Professor of Tokyo Polytechnic University (Secretary)
- K. Mizutani, Professor of Tokyo Polytechnic University
- Y. Yamamoto, Associate Professor of Tokyo Polytechnic University
- A. Yoshida, Professor of Tokyo Polytechnic University
- X. Yingli, Assistant Professor of Tokyo Polytechnic University (Secretary)

### Advisory Committee

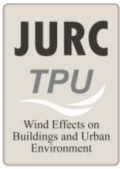
- S. Kato, Specially Appointed Kogakuin University,  
Professor Emeritus of The University of Tokyo
- H. Kawai, Professor Emeritus of Kyoto University
- T. Kurabuchi, Professor of Tokyo University of Science
- A. Mochida, Professor of Tohoku University
- T. Ohkuma, Professor Emeritus of Kanagawa University
- A. Wada, Professor Emeritus of Tokyo Institute of Technology
- T. Yagi, Professor of Kyoto University
- H. Yamada, Professor of Yokohama National University

### Key Dates

- One-page abstract submission due: December 14, 2018

### Registration

- Registration fee: standard registration before November 30: 5,000JPY  
after November 30: 7,000JPY  
student registration: 3,000JPY



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**Contacts**

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