

JURC

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Wind Effects on
Buildings and Urban
Environment

Wind Engineering JURC Joint Seminar Tokyo Polytechnic University 東京工芸大学風工学研究拠点



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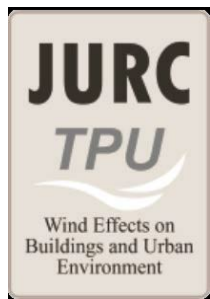
場所：東京工芸大学 中野キャンパス

1206 教室

Asian Cities' Climate Change Adaptation Action & Policy

In **Sept.** and **Oct. 2019**, Japan were strongly attacked by two super typhoons, **Faxai** and **Hagibis**, respectively, and wide areas are still reeling from damage caused by **floods**, **strong winds** and **landslides**. The Japanese cities show serious **vulnerability to disasters increasingly linked to climate change** and **discussions on the corresponding measurements** are urgently needed.

This special lecture will introduce and review **the climate change city action** and **related policy development** in **China, South Korea, Japan** and **Taiwan**.



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The frequency and scale of damage inflicted by climate-related disasters, such as floods, drought, heat waves and hurricanes, has been increasing at an alarming rate. According to the projected future climate change in East Asia, it shows there is very likely an increase in mean annual surface temperature which further causes changing climate conditions in terms of both climatic extremes and variabilities (Wamsler, 2014). And these changing climate conditions can aggravate both the existing hazards and the present vulnerable conditions, thus considerably increasing risk and disaster occurrence. Because of these changing climates, a series of impacts on cities, settlements and infrastructures may likely occur, such as cooling energy demand increase (Morakinyo et al., 2019), declining air quality, extra pressures on urban infrastructure and urban fabrics (e.g. coastal bank infrastructure, urban drainage system). The speaker will introduce and review the climate change city action and related policy development in China, South Korea, Japan and Taiwan. It is found that the information and data of the nature, scale and distribution of potential urban risks, examining relationships between every day and disaster risks across scales are needed. The more that we are aware of climate-related hazards and their corresponding urban risks, the better we can work on not only mitigation but also adaptation. These actions would increase the city's overall resilience and ability to cope with climate change, improve our people's living conditions and safe their lives, as well as respond and recover from climate change related emergencies and hazard.