

先端都市建築研究部門

Division of Advanced Urbanism and Architecture

Active Period : April 1, 2014 ~ March 31, 2019

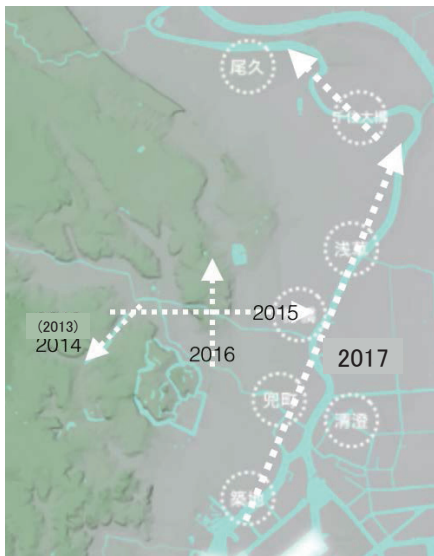
Team Members (2017)

(Chief)	Department of Architecture Faculty of Engineering	Prof. UNO, Motomu
(Professors)	Department of Architecture Faculty of Engineering	Prof. ITOH, Hirohisa
	Department of Architecture Faculty of Engineering	Prof. GOTA, Momoyo
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	Department of Architecture Faculty of Engineering	Associate Prof. KUMAGAI, Ryohei
	Department of Architecture Faculty of Engineering	Associate Prof. KAYANOKI, Madoka
	Department of Architecture Faculty of Science and Eng.	Prof. ITOH, Kaori
	Department of Architecture Faculty of Science and Eng.	Associate Prof. YASUHARA, Motoki
	Department of Architecture Faculty of Engineering	Assistant Prof. KO, Kaon
	Department of Architecture Faculty of Engineering	Assistant Prof. ISHIYAMA, Satsuki
	Department of Architecture Faculty of Engineering	Assistant Prof. ISHIGURE, Masakazu
	Department of Architecture Faculty of Engineering	Assistant Prof. SAKURAI, Takehiro
(Visiting Professor)	Graduate School of University of Tokyo	Honorary Prof. SHINOHARA, Osamu

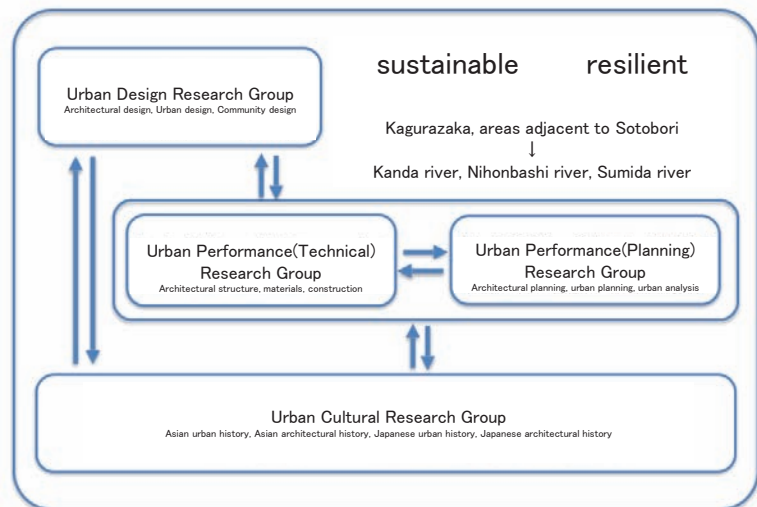
Research theme :

A synthetic study on Urban and Architectural Re-vital Design Method in Edo-Tokyo's Former Surrounding Area and at its River Front

Objective: Construction of Planning theory and planning method for sustainable and resilient urban environment by renewal of contemporary architecture and urban infrastructure

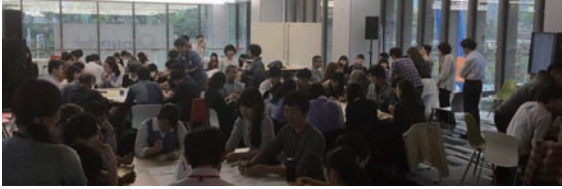


Development of Research Target Area



Framework of research organization : Design – Technology - Culture

Highlights of research outcomes in 2017 ① Sustainability



- 8th Civic School for SOTOBORI Revitalization, Apr.22nd, 2017
 "Enjoy SOTOBORI, Link the past community's memory and experience to the future"
 A borderless expanded workshop (generations, administrative borders, universities) was held @ DNP plaza, Ichigaya on Apr.22nd, 2017
 Participants : Chiyoda town assembly, Shinjuku town assembly, Universities(Hosei, TUS, Chuo, Nihon univ.), High school(Miwada gakuen), 70pers.



- Symposium "Edo case, SOTOBORI and Culture", Jul.25th, 2017
 Keynote lecture and Panel discussion were held @ Tokyo Garden Terrace Koicyo
 Organizer : "Town Meeting of SOTOBORI Waterfront Revitalization"
 Presentation : Activities on local contribution by private companies (Media, IT, Printing, Construction etc.) / "Research and Studies on SOTOBORI and Kagurazaka area + Activities on local contribution" by TUS, 100pers.



- 3rd Town Meeting for SOTOBORI Revitalization, Mar.22nd, 2018
 Activity reports by each university and Active exchange discussions on the local community were held @Hosei University (Ichigaya campus)
 Participants : Chiyoda-ku and Shinjuku-ku (local administrations as observers), Town assemblies from areas adjacent to SOTOBORI (Chiyoda-ku and Shinjuku-ku), local private companies, Universities and High school, 40pers.



Composition of Local Community Cooperation

Highlights of research outcomes in 2017 ② Resilience

Output: building data fire spread range / hour

Knowledge on simulation of urban fire prevention

- *2m width narrow street spreads fire
- *evacuation limit time depends on percentage of bare wooden structure in district
- bare wooden structure:
 - under 40%→ possibility of evacuation is high
 - over 60%→safety verification by fire spread simulation is essential

Past fires at Kagurazaka area

火災発生年月	火災発生場所	火災原因	被害状況
昭和21年	丸の内ビル	電線ショート	焼死1名、焼傷1名、焼損約100万円
昭和22年	丸の内ビル	電線ショート	焼死1名、焼傷1名、焼損約100万円
昭和23年	丸の内ビル	電線ショート	焼死1名、焼傷1名、焼損約100万円
昭和24年	丸の内ビル	電線ショート	焼死1名、焼傷1名、焼損約100万円
昭和25年	丸の内ビル	電線ショート	焼死1名、焼傷1名、焼損約100万円



- Measure survey "Uwo-toku" at Kagurazaka, Mar.5th, 2017
 A measure survey of a Japanese traditional restaurant at Kagurazaka was held for the objective on archiving the cultural property : a traditional wooden architecture, built just after the end of world war II. Architectural drawings and models were realized.

Public Open Spaces
 Passable and place to Stay : Outside Public spaces

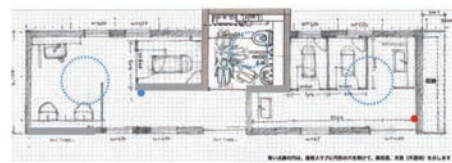


Basic research for the Development of evaluation method on durability of wooden construction (major architectural archetype at Kagurazaka area)

Mechanical properties and durability of reference wooden construction
 ↳ Establishment of evaluation method, by practicing non-destructive and environmental measurement tests
 ↳ Proposition on appropriate maintenance method of wooden construction in Kagurazaka area

Mechanical properties of decayed wood joints
 ↳ Material degradation and joints properties
 ↳ Make test-models of joints by collected components of different parts of old house

Built in 70 years ago



- Renovation study on Ushigomemitsu Public Toilet, Oct. 2017 -

A study on interaction between townscape improvement along the marathon course of Tokyo Olympic 2020 and adjacent urban design.
 Support activities and Research studies for "Kagurazaka Culture Promotion Club", by TUS's skilled and knowledgeable female graduate students on Architecture

- Exhibition on Outcomes of Kagurazaka area studies, Apr. 2017-

@Exhibition booth of Kagurazaka Okamisan-Kai, on the 1st floor of TUS Morito Memorial Hall (Kagurazaka)
 Panel Presentations on Outcomes of Kagurazaka area studies, by members of TUS's architectural division