

Tokyo Polytechnic University Wind Engineering Research Center
Year 2017 Joint Usage / Research
Research Application Guide

1 December 2016

Tokyo Polytechnic University
Wind Engineering Research Center

The Tokyo Polytechnic University Wind Engineering Research Center was founded in 2002 and it has since been involved in educational and research activities with domestic and overseas educational and research institutes. Relevant activities include the 21st Century Center Of Excellence Program (Wind effects on Buildings and Urban Environment) in 2003 and the Global Center of Excellence Program (New Frontier of Education and Research in Wind Engineering) in 2008. Through those programs we have achieved excellence in educational and research activities. Furthermore, in 2013 the Joint Usage Research Center Program JURC was established by the Japanese Ministry of Education, Culture, Sports, Science and Technology MEXT "Wind Engineering Research Center" to promote collaboration with international research institutes worldwide. Currently under the JURC program 24 research activities are ongoing and 1 workshop is organized annually.

The following activities have been proposed for 2017:

1. Types of research topic

There are four types of joint research topic and applicants can apply for plural themes.

(1) Specific Research topic

The Tokyo Polytechnic University (TPU) Wind Engineering Research Center (WERC) sets up specific research topics in wind engineering and seeks applicants to work together with members of TPU and WERC. If applicants want to use our facilities and data they need to make arrangements with TPU and WERC members before applying. Research workshops need to be held to announce research results. The budget of any specific research topic will not exceed 800,000 Yen including travel expenses and costs for research meetings. However, when researchers who have made remarkable achievements are invited such costs will be considered separately.

- Wind Hazard Mitigation and Wind Resistant Design
(TPU/WERC member: Masahiro Matsui*, Akihito Yoshida, Yong Chul Kim)
Specific Theme
 - Researches on tornado flow characteristics and their effects on wind loadings
 - Researches on characteristics of wind forces acting on high-rise buildings
 - Researches on dynamic characteristics of structures to determine wind-induced responses
 - Researches on techniques for evaluating fatigue damage caused by wind response

- Indoor Environment
(TPU/WERC member: Kunio Mizutani*, Weirong Zhang)
Specific Theme
 - Researches on building environments to mitigate natural disasters
 - Researches on building ventilation in urban areas
 - Researches on indoor airflow, thermal environment and energy issues

- Outdoor Environment
(TPU/WERC member: Weirong Zhang*, Nobutaka Fukudome)
Specific Theme
 - Researches on pollutant dispersion in urban areas
 - Researches on urban ventilation
 - Researches on outdoor thermal environment in urban areas

*: person in charge of each field

(2) General Research Topic

Applicants set up their own research topic relating to a wind engineering topic and work together with members of TPU and WERC. Please refer to specific research topic.

If applicants want to use facilities and data of TPU and WERC they need to make arrangements with TPU and WERC members before applying. Research workshops need to be held to announce research results. Budget of general research theme will not exceed 600,000 Yen including travel expenses and costs for research meetings.

(3) Research Workshop

Applicants set up the workshop topic and hold together with TPU and WERC

members.

Research workshops need to be prepared with a precise aim. Please refer to specific research topic. Budget of research workshop will not exceed 200,000 Yen including travel expenses.

(4) Fund prepared research

Applicants together with TPU and WERC members should prepare their own funding for a research separately. Applicants can use facilities and data of the Wind Engineering Research Center but no budgets are provided for this type of research. Applicants need to make arrangements with TPU and WERC members before they apply. Research meetings are not necessarily held for this type of research.

2. Application Procedure

(1) Qualifications

Researchers from universities, research institutions, independent administrative agencies and companies can be candidate researchers (applicants). However, researchers from private companies should have no commercial objectives and there should be no impediments to announcements of research results or ownership of intellectual property rights.

(2) How to fill in application form

Before application, read this guide thoroughly and consult with TPU and WERC members about a research topic and contents. For each research topic a specific TPU and WERC member will be a collaborator who will work with the applicant to determine an applied research. Basically, applicants will select collaborative TPU and WERC members but if an applicant has no preference about who should be a collaborator they should contact a person in charge of each research field (see 1. (1) Specific Research Topic).

To apply, fill in the forms of "Year 2017 Tokyo Polytechnic University Wind Engineering Research Center Joint Usage/Research Center Application (New Form1)", and submit as below:-

(3) Submission and Deadlines

Each application form for specific research, general research and research meeting

must be filled out and sent as a Microsoft Word file via e-mail to the below address by the deadline. When an application is received a notification e-mail will be sent the next day. If an applicant receives no e-mail he must contact the Wind Engineering Research Center Office.

Submit to

Tokyo Polytechnic University Wind Engineering Research Center Office

Tel: +81 (0) 46 242 9658

E-mail: collaborate@arch.t-kougei.ac.jp

Schedule

Application period: 1 Dec 2016 ~ 31 Jan 2017*1)

Announcement of selection results and budget confirmation: 31 Mar 2017

Submission due date of collaborative researchers list and Letter of Commitment:
21 Apr 2017

Submission due date of permission from the top of the relevant organization:
21 Apr 2017

Period of research: To be announced with selection results

Submission due date of financial report: Beginning of March 2018

Submission due date of result report: End of April 2018

*1) No specific application period for Fund Prepared Co-researches

(4) Selection and Announcement of Successful Candidates

Selection of successful candidates will be based on an examination of the Wind Engineering Research Center Steering Committee constituted of TPU and WERC members and intellectuals from outside TPU and WERC. Notification of successful application will be sent to the representative researcher. Besides research contents, budget limit and availability of research facilities will also be considered for the selection.

(5) Inquiry

Research facilities, research topic, research contents, research period, etc., will need to be discussed thoroughly with TPU and WERC members.

Tokyo Polytechnic University Wind Engineering Research Center members

(Belong to Graduate School Engineering/Department of Architecture and Wind

Engineering)

- Field of Strong Wind Disaster Prevention • Wind Resistant Structure
(TPU/WERC member: Masahiro Matsui*, Akihito Yoshida, Yong Chul Kim)
- Field of Indoor Environment
(TPU/WERC member: Kunio Mizutani*, Zhang Weirong)
- Field of Outdoor Environment
(TPU/WERC member: Zhang Weirong *, Nobutaka Fukudome)

*: person in charge of each field

3. Considerations

(1) Selection and Announcement of Selection

Application proposals will be fairly examined by the Wind Engineering Research Center Steering Committee and selection results will be sent to representative researchers.

(2) Required Expenses

Expenses for researches including research equipment and travel expenses can be paid. However, as a result of examination, the required budget will not be provided fully. Budget execution will be carried by the Tokyo Polytechnic University Education and Research Support Office through TPU and WERC members.

(3) Reports

The representative researcher needs to submit a summary of his research results on an attached form electronically (must be a Microsoft Word file). The report contents will be posted to the Wind Engineering Research Center publication web site.

(4) Research Result Report

A research result report must be submitted by the end of every fiscal year.

(5) Accommodation

When research experiments are held in the Wind Engineering Research Center and researchers require accommodation, accommodation near Hon-Atsugi station will be recommended. Please discuss with TPU and WERC members beforehand.

(6) Other

- 1) If necessary an applicant will receive permission from the top of the relevant organization before application.
- 2) After an application is accepted, collaborative researchers need to receive permission from the top of the relevant organization and this will be submitted to the Wind Engineering Research Center Manager.

Participants are expected to follow the code of conduct of research activities at Tokyo Polytechnic University and are asked to submit a letter of commitment.

Please access to the below URL to see the code of conduct of research activities at TPU <http://www.t-kougei.ac.jp/research/outside/fund/>

- 3) To use research facilities, discuss with TPU and WERC members and follow their instructions.
- 4) To apply, a form must be used and submitted as an attached file via electronic medium. An application form can be downloaded from the Homepage (Microsoft Word form only). <http://www.collaborate.wind.t-kougei.ac.jp/joint/>
- 5) TPU and WERC will not be responsible for any loss or accident during experimental tests. This is the responsibility of relevant organizations. When postgraduate students are participating researchers they must subscribe to an accident insurance policy 「Education and Research Accident Insurance for Students」 at their relevant institute and report to it about participating outside co-research with TPU/WERC.

For details, please contact the corresponding department.

- 6) Application forms and selection results can be seen on the Wind Engineering Research Center Homepage.
- 7) Dealings and ownership of intellectual property rights resulting from co-research have to be decided by consultation unless already agreed in prior consultation. For details, please contact the Tokyo Polytechnic University Education and Research Support Office.
- 8) For any other inquiries contact TPU and WERC members or Tokyo Polytechnic University Education and Research Support Office.

Contact

Tokyo Polytechnic University Wind Engineering Research Center Office

E-mail: collaborate@arch.t-kougei.ac.jp

Address: 1583 Iiyama, Atsugi, Kanagawa, Japan 243-0297

Tel: +81 (0) 46 242 9658

Application Q&A

Q1. Are researchers from private companies qualified to be representative of joint researches at TPU?

A1. Researchers from private companies are qualified to be representative researchers providing that they have no commercial objectives and there are no impediments to announcement of research results or ownership of intellectual property rights.

Q2. What about intellectual property rights of research projects' results?

A2. Dealings and ownership of intellectual property rights resulting from research projects have to be decided by consultation unless already agreed in prior consultation.

Q3. Is there any limitation on the number of applications that a candidate can make in the same year?

A3. There is no limitation. However it is necessary to consider the effort made for each research project to avoid interference with other works.

Q4. Is it possible to apply across multiple fiscal years?

A4. From fiscal year 2017 we accept applications for a single year only.