

Research Center for Fire Safety Science, Tokyo University of Science
Application Guide for Collaborative Research in 2025

1. Objectives

The Research Center for Fire Safety Science conducts collaborative research with researchers within and outside the Tokyo University of Science.

The Center aims to promote research and education on fire safety and facilitate collaborative research. By publishing its outcomes, the Center contributes to the advancement of fire safety research and education of those who will lead the next generation. Research centered on multidisciplinary theoretical and practical aspects of fire safety utilizing large-scale experimental facilities is being conducted, contributing to reducing fire losses.

The Center solicits research proposals from domestic and international sources, aiming to contribute to reducing fire risks in urban spaces utilizing state-of-the-art technologies.

2. Reference research themes

This year, applications for collaborative research will be accepted in the following categories.

[Priority Research Category]

A. Research on the early detection of catastrophic events

In fires, sudden and rapid changes (referred to as catastrophic events) can occur, leading to a dramatic increase in damage. Examples include ignition, transition from smoldering to flaming, flashover, and backdraft. Detecting signs of these events before their occurrence will reduce fire damage and firefighting risks. In AY2025, we solicit research that contributes to the early detection of catastrophic events from a wide range of perspectives.

[Large-scale Experimental Research Category]

B. Experimental research on building structural fire resistance

Large-scale experimental challenges to use the Structural Fire Resistance Furnace or the Multiple Full-scale Furnace

[General Research Category]

C. Research on building fire safety

D. Research on material combustion science

- E. Research on firefighting and disaster prevention
- F. Research on large-scale fires
- G. Research on fire safety and risk assessment
- H. Other research contributing to the advancement of fire science and technology

3. Planned number of accepted proposals

Priority research:	1
Large-scale experimental research:	1
General research:	Several

4. Period of collaborative research

The research period is between April 2025 (on the selection date) and 31 March 2026.

5. Eligible applicants

The Principal Investigator (PI) must be a faculty member of a domestic or international university, a researcher affiliated with a research institution, or an individual recognized by the Director of the Center for Fire Science and Technology as having equivalent research capabilities, and must be engaged in research related to fire safety science (researchers recognized as having doctoral-level or higher qualifications are preferred). Co-investigators may include technical staff and graduate students. Please note that the maximum number of applications allowed per Principal Investigator is limited to one.

6. Expenses

The Center will directly cover the necessary expenses within the budget determined based on the application, up to the following limits:

Priority research:	JPY 750,000
Large-scale experimental research:	JPY2,000,000
General research:	JPY 750,000

[Covered expenses]

The following expenses will be covered:

- Personnel costs necessary for experiments conducted in the Fire Research and Test Laboratory, Tokyo University of Science
- Costs for consumables and preparation of experimental equipment
- Expenses related to the production of test specimens
- Round-trip transportation costs for the Principal Investigator and co-investigators to Tokyo University of Science
- Accommodation fees for the Principal Investigator and co-investigators at Tokyo University of Science facilities
- Other expenses deemed necessary by the Center Director

[Expense not covered]

- Costs related to reporting and publishing research results
- Consumables and other expenses used outside the Fire Research and Test Laboratory, Tokyo University of Science
- Travel expenses to locations other than the Tokyo University of Science

7. Accommodation

The Principal Investigator and co-investigators can use the University's accommodation facilities (JPY3,000 per night for a single room). Please apply through the Center. If you arrange accommodation at hotels or other facilities, please bear the accommodation expenses.

8. Selection criteria

The Selection Committee will evaluate proposals based on the following criteria:

- The necessity of using the Fire Research and Test Laboratory
- Clarity of research content and objectives
- Validity of research plan and methodology
- Potential for publication of results, especially in international journals
- International perspective
- In case of concurrent applications for other competitive external funding, the

necessity of such overlap

- For continuing projects, consideration of past performance (including a summary of previous results)

9. Selection decisions

The Principal Investigator will be notified by email in early April 2025 (tentative).

10. Application deadline

Applications must arrive no later than 7th March 2025.

11. Application procedure

Please download the Collaborative Research Application Form from the Center's website (https://gcoe.tus-fire.com/joint/open_recruitment/), fill in the required information, and submit it via email to the address provided below.

E-mail: kasaienzen-ml@tusml.tus.ac.jp

Center for Fire Safety Science

Tokyo University of Science

2641 Yamazaki, Noda-shi, Chiba 278-8510 Japan

12. Important notes for application

- 1) If your application is accepted, the affiliated institutions of both the Principal Investigator and co-investigators will need to submit a "Consent Form for Joint Usage/Research Implementation" (Form 1) based on the "Terms of Use for Joint Usage/Research Center, Research Institute for Science and Technology, Tokyo University of Science." Please obtain approval from your institution in advance.
- 2) When applying, please consult with a faculty member of the Center in advance regarding the research topic, planned facility usage period, necessary expenses, and other matters after obtaining preliminary consent from your affiliated institution at the time of application.
- 3) The project can be continued for up to one additional year, but you must reapply as a "Continued Research Topic."

13. Publication of research results

Research results will be made public in principle. At the end of the research period, the Principal Investigator must submit a “Research Results Summary Report” and present the research achievements at a “Results Presentation Meeting” hosted by the University. The “Research Results Summary Report” will be published on our website and other platforms. Additionally, we request that research papers based on this study be submitted to the International Journal for Fire Science and Technology, published by the University. If research papers are published in other journals, please include a statement acknowledging that the research was conducted in collaboration with the “Center for Fire Science and Technology, Tokyo University of Science” and submit one reprint.

14. Contact information

For details regarding the call for collaborative research, please contact us at the address below. We also welcome consultations from those who have proposals for new research topics or are unsure how to proceed with their ideas.

Dr. Ken Matsuyama

Center for Fire Science and Technology, Tokyo University of Science
2641 Yamazaki, Noda-shi, Chiba 278-8510, Japan

Tel.: +81-4-7124-1501 ext. 5032

Fax: +81-4-7123-9873

E-mail: kmatsu@rs.tus.ac.jp

Terms of Use for the Joint Usage/Research Centers of the Research Institute
for Science and Technology, part of the Organization for Research
Advancement of the Tokyo University of Science

Article 1 (Purpose)

The objective of this Terms of Use is to set forth the rules which should be followed by every person (“Researcher” or “Researchers”) who, with the facilities and equipment of a Joint Usage/Research Center (the “Center”) of the Research Institute for Science and Technology, which is part of the Organization for Research Advancement of the Tokyo University of Science (the “University”), conducts a research project stated in a joint usage/research application that has already been submitted (such project is hereinafter referred to as the “Individual Project”) in a joint usage/research project (the “Joint Usage/Research Project”) conducted by the Center, which is certified by the Ministry of Education, Culture, Sports, Science and Technology as a joint usage/research center, thereby ensuring that the Joint Usage/Research Project operates smoothly and produces satisfactory results.

Article 2 (Basic Policy)

1. In line with the purposes of the Joint Usage/Research Project, an Individual Project may only be a project conducted for peaceful purposes.
2. Researchers must safely and properly conduct every test and experiment related to the Individual Project (“Experiment, etc.”) in accordance with all the rules of the Center and other related regulations stipulated by the University. Researchers shall also follow all safety and management instructions which may be given by the University as necessary.
3. If the Researchers of the Individual Project are affiliated with multiple organizations, the representative of the Individual Project shall take the required measures to ensure that all the Researchers observe this Terms of Use.

Article 3 (Inspection of Facilities and Equipment)

1. Before starting an Experiment, etc., Researchers shall inspect as required by the University the functions and conditions of the experiment site, etc.; if there is any problem with the functions or conditions thereof, a Researcher shall immediately notify the Center accordingly.
2. When finishing an Experiment, etc., the Researchers shall restore the experiment site, etc. to its original state and have such site, etc. inspected by the Center. If the Center gives the Researchers any instructions regarding restoring the experiment site to its original state or taking any other such action, etc. based on the results of such inspection, the Researchers shall take the required measures in accordance with such instructions.

Article 4 (Use of Facilities and Equipment)

1. Researchers may use the Center and its facilities, equipment and articles only within the scope of the Individual Project.
2. Researchers shall follow the instructions of the Center when using the Center and its facilities, equipment and articles for Experiments, etc.

3. Every Researcher who is a graduate student shall take out a personal accident insurance policy equivalent to the Personal Accident Insurance for Students Pursuing Education and Research. If a graduate student conducts an Experiment, etc., a faculty member of his/her organization who is not lower than an associate professor in rank shall observe and supervise the Experiment, etc.

Article 5 (Bringing in of Articles and Chemicals)

1. Researchers shall follow the relevant procedures established by the University when bringing into the University articles and chemicals used for Experiments, etc. and shall store and manage such articles and chemicals on their own responsibility as instructed by the University. If the Center or any of its staff members suffers any damage or harm attributable to articles or chemicals brought in by a Researcher, the Researcher shall repair the damage on his/her own responsibility and at his/her own expense or shall compensate the Center or staff member for the damage or harm.
2. When finishing all Experiments, etc., Researchers shall, on their own responsibility and at their own expense, collect all the articles and chemicals brought into the University for the Experiments, etc. under the preceding paragraph.

Article 6 (Expenses for Experiments, etc.)

1. In accordance with relevant procedures established separately, the University shall reimburse Researchers for the expenses of Experiments, etc. conducted by them within the limit of the budget stated in the notice of the results of research proposal screening.
2. If Researchers need to make any improvements to the facilities or equipment of the Center or make any additions to the equipment of the Center for an Experiment, etc., they shall obtain the prior consent of the University.

Article 7 (Report on the Results of Use of the Center)

1. When finishing all Experiments, etc., Researchers shall put the results of the Experiments, etc. into a report on the summary of research results in the form created by the University and promptly submit the report to the Center. The University shall assess the report submitted as the results of the Joint Usage/Research Project and report the results of the assessment to the Researchers.
2. In addition to the case mentioned in the preceding paragraph, if demanded by the University, Researchers shall give the University a written report on the progress of the Individual Project and the situation after the completion of the Individual Project.
3. The University may report matters reported by Researchers under the preceding two paragraphs to the Ministry of Education, Culture, Sports, Science and Technology if demanded by the Ministry. The Researchers shall not object to the Ministry's making the reported matters public.

Article 8 (Making Public of the Results of Use of the Center)

1. In principle, the contents of reports on the summary of research results shall be made public by the University and Researchers in accordance with the relevant rules established by the University.

2. When any contents of a report on the summary of research results are made public under the preceding paragraph, the contents shall be identified as the results of the Joint Usage/Research Project in accordance with the relevant rules established by the University.
3. If Researchers have made public any contents of their report on the summary of research results, they shall immediately submit to the Center one (1) copy of the document made public.

Article 9 (Intellectual Property)

1. If Researchers have made any invention, etc. in the course of the Individual Project or made any profits from the results of the research, they shall promptly notify the University.
2. The handling of such invention, etc. and profits shall be determined through separate consultation between the University and the Researchers.

Article 10 (Accidents)

1. If any accident or disaster occurs in connection with the Individual Project, the Researchers shall immediately report it to the Center in accordance with the relevant rules established by the University.
2. Researchers shall, on their own responsibility and at their own expense, promptly handle and end all accidents and disasters occurring in connection with the Individual Project, except for accidents and disasters attributable exclusively to the negligence or willful misconduct of the University.

Article 11 (Suspension of Use of the Center)

If any Researcher has failed to comply with this Terms of Use, submitted any document containing false information to the Center, or interfered with the operation thereof, the University may suspend the use by the Researcher of the Center or take other measures against the Researcher.

Article 12 (Compensation for Damage)

If any facilities, equipment or articles of the Center suffer any damage or loss attributable to the willful misconduct or negligence of a Researcher, the Researcher shall compensate the Center for the damage or loss.

Article 13 (Confidentiality)

1. In light of the provisions of Articles 7 and 8, the University and Researchers shall not, without the consent of the other party, divulge to any third party any technical or business information which may be disclosed or acquired from the other party in the course of the Individual Project if the information is marked or identified as confidential.
2. The provisions of the preceding paragraph are not applicable to the following information:
 - (1) Information which is already in the public domain before being disclosed or acquired from either party;

- (2) Information which can be proved by either party to have been already in its possession before being disclosed or acquired from the other party;
- (3) Information which becomes part of the public domain through no fault of either party after being disclosed or acquired from the other party;
- (4) Information which can be proved by either party to have been acquired by the party from a duly authorized third party after being disclosed or acquired from the other party; and
- (5) Information which can be proved by either party to have been created or developed independently by the party without reference to the information.

Article 14 (Changes)

In light of the fact that the Joint Usage/Research Project is conducted at a joint usage/research center certified by the Ministry of Education, Culture, Sports, Science and Technology, Researchers agree to the following:

- (1) If the Rules on the Certification of Joint Usage/Research Centers or other related rules are revised by the Ministry of Education, Culture, Sports, Science and Technology, the Joint Usage/Research Project, this Terms of Use and the Individual Project may be changed accordingly.
- (2) The Researchers will not make any claim against the University even if they suffer from any loss attributable to the above changes.

Article 15 (Consultation in Good Faith)

If there arises any matter not contained in this Terms of Use or question about the interpretation of this Terms of Use, the University and Researchers shall endeavor to amicably settle the matter or question through consultation in good faith between the parties.

Article 16 (Language)

The governing language of this Agreement shall be Japanese. If a translation hereof is made for reference purposes, only the Japanese original shall have the effect of a contract and such translation shall have no effect.

Supplementary Provision 1

This Terms of Use take effect on January 26, 2016 and become applicable on April 1, 2016.

(Form No. 1)

Date:

Consent for Joint Usage/Research

Director, Research Center for Fire Safety Science,
Research Institute for Science and Technology,
Tokyo University of Science

Address:

Name of Organization:

Head of Organization:

(Signature)

I agree that the researchers will responsibly conduct the joint usage/research project approved on (yy/mm/dd) in compliance with the Terms of Use for the Joint Usage/Research Centers of the Research Institute for Science and Technology, part of the Organization for Research Advancement of the Tokyo University of Science.

1. Research Representative and Joint Researchers

Name	Organization	Title

2. Research Title

3. Research Period From _____ to _____

4. Responsible Person of the Tokyo University of Science

Organization	Title	Name
Tokyo University of Science		