

Application Guidelines for RIEC Nation-wide Cooperative Research Projects (Type A and B) in FY 2024

As the Center for Nation-Wide Cooperative Research on ICT, Research Institute of Electrical Communication (RIEC), Tohoku University works with the research community to conduct advanced research in this field and support the foundations for the future. It covers a variety of joint research and meetings (Type A and B) held at our institute on an individual proposal basis by researchers from domestic and international research institutes. Programs also include inter-institutional collaboration across multiple research disciplines. RIEC faculty members are in charge of each project. This cooperative research program does not presume simple joint use of RIEC facilities by participants; it features the precondition that participants conduct cooperative studies with research collaborators of RIEC.

Participants in RIEC Nation-wide Cooperative Research Projects (Type A and B) in fiscal 2024 are invited in line with the following guidelines.

1. Application details

(1) The following themes are to be invited in fiscal 2024.

- 1) Computing systems with transcendent computational capability
- 2) Information infrastructures as natural as breathing
- 3) Super-intelligent systems based on human understanding

The Research Institute of Electrical Communication (RIEC) made organizational changes on April 1, 2023, to promote more rapid implementation in society. As a result, the themes of the call for proposals will also be changed, so please refer to the outline of the organizational changes on the RIEC web site.

<https://www.riec.tohoku.ac.jp/en/about-riec/organization-3/>

(2) The RIEC Nation-wide Cooperative Research Projects Program consists of two categories.

“Type A: Research Projects” which uses RIEC facilities, equipment, etc. to conduct research.

“Type B: Research Projects Seminar,” focuses on study meetings.

(3) The following four types of research are in place to diversify the Cooperative Research Projects program.

- ITL: International Cooperative Research Project– themes that involve researchers belonging to overseas research institutes who will act as principal investigators or share studies with RIEC researchers
- YNG: Young Researcher’s Project – both Principal Investigator (PI) and research collaborator of RIEC (see section 5 for details) must be 45 years old or younger as of April 1, 2024.
- IUC: Industry-University Cooperative Research Project– themes that involve private-sector R&D staff who will act as principal investigators or share studies with RIEC researchers

(restricted to Type B)

- GNR: General Joint Research and Advancement

(4) The research period is limited to a maximum of three years, including the year of commencement.

Please refer to 5. Application Documents for details.

2. Qualifications

Qualified for application are teachers and researchers belonging to universities, technical colleges and public-sector research institutes; and researchers belonging to private-sector companies, organizations, etc.

Postgraduate students of universities and advanced course students of technical colleges may join research teams as members.

3. Application terms

From Jan. 10 to Feb. 29, 2024 <strictly abide by the deadline>

4. How to apply

(1) A researcher representing his/her research team, called the Principal Investigator (PI), shall apply only after consulting a selected research collaborator at RIEC about a research theme/plan, etc. in advance. Research collaborators at RIEC also introduced in the contact information at the end of this document.

For the overview of RIEC, please visit its website: <https://www.riec.tohoku.ac.jp/en/>

(2) Please file an application through "RIEC Nation-wide Cooperative Research Projects System."

[About "RIEC Nation-wide Cooperative Research Projects System"]

<https://www.riec.tohoku.ac.jp/en/nation-wide/koubo/user-registration/>

["RIEC Nation-wide Cooperative Research Projects System" login]

<https://crpp.riec.tohoku.ac.jp/crpp/login.xhtml>

(3) User registration

Those who use the system for the first time are required to complete user registration beforehand to get a login ID and a password. As user registration may take a few days, please complete it not later than 10 days before the application deadline.

[About user registration] ※Google Forms

<https://docs.google.com/forms/d/e/1FAIpQLSd8VYvcQpI45RnRskhjVxJlppakOHQWpuncc4P3hYQ2E57vAQ/viewform>

5. About application documents

(1) New application and continued application

	Application documents	
	Web application form	Attached File (Upload PDF version to web system)
Type A	RIEC Nation-wide Cooperative Research Projects Application	1) Research execution plan(Attachment :Type A) 2)【appendix : Type A】Research Organization 3) Research Expenses (by fiscal year) : Type A 4) Letter of Acceptance (Signature of the organization head is not required & upload PDF version)
Type B		1) Research execution plan(Attachment :Type B) 2)【appendix : Type B】Research Organization 3) Research Expenses (by fiscal year) : Type B 4) Letter of Acceptance (Signature of the organization head is not required & upload PDF version)

(2) New application: Regarding applications for new applications whose first year in FY2024

- ① Please prepare the application documents in (1) and a RIEC Nation-wide Cooperative Research Projects System].
- ② Research period: For new applications whose first year is FY2024, up to 3 years (until March 31, R9).
- ③ Please prepare research expenses (by fiscal year) for each fiscal year. Delete any unnecessary sheets.

(3) Continuing project application: Regarding applications for projects in the second and third years that will continue in FY2024.

- ① Please prepare the application documents in (1) similar to the new application and apply from the [RIEC Nation-wide Cooperative Research Projects System].
- ② Research period
 - Projects whose second year is FY2024 will have a maximum of 2 years (until March 31, 2026)
 - Projects whose third year is FY2024 can be applied for one year (until March 31, 2025).
- ③ Please prepare research expenses (by fiscal year) for each fiscal year. Delete any unnecessary sheets.
- ④ Regarding the “Letter of Acceptance”, if the principal investigator has not changed his or her affiliated institution since the previous year (FY2023), the submission may be omitted.

(4) Please download the attached file from the following URL.

<http://www.riec.tohoku.ac.jp/en/nation-wide/koubo/>

(5) The average allocation amount per case in 2023 is as follows.

Type A : about 257,000yen

(Trip expenses 153,000yen, Equipment & Consumables 104,000yen)

Type B : about 205,000yen

6. Notice of outcome

The joint project selection committee, which includes external experts, will decide whether to accept or reject the application after reviewing the application documents, and the results will be notified in mid-April 2024 (*).

The principal investigator and co-researcher for the selected project will be deemed to have been commissioned as "Tohoku University Research Institute of Electrical Communication Joint Researcher."

*From FY2025 onwards, for ongoing projects, only the amount of research funds allocated for the relevant year will be notified.

7. Others

(1) Treatment of intellectual property rights

When intellectual property is created as a result of RIEC Nation-wide Cooperative Research, the handling is determined by mutual consultation of parties concerned.

(2) About expenses

Project will be provided with expense allocations equivalent to expenses for traveling to RIEC for research, participation in study meetings, etc. and equipment/consumables expenses necessary for research at RIEC (restricted to Type A only). Allocated amounts are subject to change according to the number of research projects adopted.

Expenses will be allocated for the implementation of RIEC Nation-wide Cooperative Research and the holding of research meetings. The use of expenses is limited to those related to the implementation of RIEC Nation-wide Cooperative Research, and are specifically as follows. The amount of expenses allocated will vary depending on the number of projects selected.

Type A : Expenses for the purpose of conducting research (property expenses necessary for conducting research, such as travel expenses or online related expenses in lieu of travel expenses)

Type B : Expenses required to participate in and hold workshops, etc. (travel expenses or alternative online related expenses, etc.)

(3) Regarding projects with research periods spanning multiple years

Research expenses are allocated for each business year and cannot be carried over to the next year.

For joint project research that spans multiple years, the research period may be shortened or changed depending on the budget, policy, etc.

(4) Accommodation

As RIEC has no lodging facilities, researchers are required to secure accommodation individually.

(5) Submission of reports on cooperative research

PIs shall submit research reports online through the "RIEC Nation-wide Cooperative Research Projects System" by a separately notified date. In case of discontinuation of the joint project research in the middle of the research period, please submit a report by a separately communicated deadline.

(6) Description of acknowledgment

In publishing reports on the outcome of research as theses, researchers are requested to add at the end of such papers a sentence to the effect that their studies were conducted as "research under the Cooperative Research Project Program of the Research Institute of Electrical Communication, Tohoku University."

Please refer to the following examples in writing acknowledgment.

- ① Part of this work was carried out under the Cooperative Research Project Program of the Research Institute of Electrical Communication, Tohoku University.
- ② This work was performed in the Cooperative Research Project of the Research Institute of Electrical Communication, Tohoku University.
- ③ We acknowledge the stimulated discussion in the meeting of the Cooperative Research Project of the Research Institute of Electrical Communication, Tohoku University.
- ④ This conference was partially supported by the Research Institute of Electrical Communication, Tohoku University.

You may use RIEC, an acronym for the Research Institute of Electrical Communication, instead of writing its full name.

(7) RIEC Annual Meeting on Cooperative Research Projects

You may be asked to make a presentation on your research at the RIEC Annual Meeting on Cooperative Research Projects scheduled around the end of fiscal 2024. The conference is intended to be open to the general public. Please present on your research results to the extent that they can be made publicly available.

(8) Facilities and equipment related to RIEC Nation-wide Cooperative Research Projects.

The facilities and other facilities of this institute can be used for conducting RIEC Nation-wide Cooperative Research Projects.

(a) Laboratory for Nanoelectronics and Spintronics :

<https://www.nanospin.riec.tohoku.ac.jp/index-e.html>

(b) Fundamental Technology Center: <https://www.ftc.riec.tohoku.ac.jp/>

(c) Tohoku University Core Facility Center: <https://www.cfc.tohoku.ac.jp/en/>

8. Contact

RIEC Cooperative Research Project Office, Tohoku University

2-1-1 Katahira, Aoba-ku, Sendai 980-8577, JAPAN

TEL: +81-22-217-5422

FAX: +81-22-217-5426

E-mail: riec-crpp@grp.tohoku.ac.jp