

Network Joint Research Center (NJRC) for Materials and Devices

Application Guidelines for Joint Research Programs FY2024

These guidelines are translations of the original Japanese text. If any differences in wording or interpretation should occur between the two, the Japanese guidelines will take precedence.

Introduction

The Network Joint Research Center (NJRC) for Materials and Devices is a system of research institutions established by Research Institute of Electronic Science, Hokkaido University, Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Institute for Chemistry and Life Science, Laboratory of Innovation Research, Tokyo Institute of Technology, SANKEN, Osaka University, and Institute for Materials Chemistry and Engineering, Kyushu University as a cooperative usage and research center for investigators to conduct joint studies beyond their own institutes.

Since receiving certification of activity authorization as a Joint Usage/Research Center from the Ministry of Education, Culture, Sports, Science and Technology in 2010, the NJRC has vigorously developed activities to promote cooperative research in the area of materials and devices.

The following is the application guidelines for the open call for proposals for FY2024.

Programs

Basic Joint Research Program

The center supports bottom-up (proposal)-type joint research based on applicants' free ideas and approaches in the field of materials and devices. Research expenses are about 150,000 yen.

Program for Utilization of Facilities and Equipment

This program aims to contribute to improving applicants' research infrastructure by providing access to state-of-the-art facilities and equipment owned by the five institutes. Research funds are not provided.

Crossover Joint Research Program

This is a goal-setting program that combines, for example, materials and AI, materials and light, life science and mathematics, and materials and social science. The program develops the fields into interdisciplinary fusion research, leading to the creation of new areas. Research expenses are about 300,000 to 400,000 yen.

Expanded Joint Research Program

By conducting joint studies with two or more research areas (institutes), the center aims to promote personnel exchanges and develop original research through multifaceted perspectives. Research expenses are about 300,000 to 400,000 yen.

Collaborative Research Laboratory (CORE-Lab) Program

A selected young investigator forms a research team as a project leader and stays at the host institute for a mid- to long-term stay to conduct research activities. Through in-depth discussions with outstanding investigators, the program is

expected to produce breakthrough results and innovations. Research period is for two years. Research expenses are about 2 million yen per year in FY2025.

Host Institutes

- Research Institute for Electronic Science, Hokkaido University
: Materials-Light-Life-Mathematics Complex Science Research Area
- Institute of Multidisciplinary Research for Advanced Materials, Tohoku University
: Material Creation and Advanced Measurements Research Area
- Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology
: Chemistry for Material Systems Research Area
- SANKEN, Osaka University
: Nanoscience and Devices Research Area
- Institute for Materials Chemistry and Engineering, Kyushu University
: Material and Functions Research Area

An investigator affiliated with one of the five institutes above will serve as a coresearcher (a host faculty member). The NJRC's website (<https://five-star.sanken.osaka-u.ac.jp/>) covers all information necessary for application, including guidelines, a researcher database useful for finding partners for joint investigations, and a list of available equipment at the host research institutes.

Before making applications, thorough discussion between applicants and host researchers or the person in charge of facilities and equipment should be held about the aim and the plan of the research projects.

Depending on the content of an application, we might adjust the host institute or the program category to more appropriate ones.

Usage of Research Funds

Research funds can be used for travel expenses, article submission fees, and expendables (such as reagents) which are necessary to conduct joint research. Regarding Collaborative Research Laboratory (CORE-Lab) Program alone, research funds can be used also for equipment necessary to conduct joint research.

Research funds are not directly allocated to a principal investigator. After an application becomes approved, guidance on usage of the funds will be provided to an applicant by the host institute. Research funds should be used in accordance with the guidance.

Eligible Applicants

Researchers affiliated with national, public, and private universities, public research institutes, private companies (limited to academic research content), and other institutions equivalent to those.

Applicants for Collaborative Research Laboratory (CORE-lab) Program should be young researchers under the age of around 45.

Research Period

From 1 April 2024 to 31 March 2025

How to apply

Applications can be made on an online system for NJRC's open calls. As the application form and the manuals are provided only in Japanese, we recommend that you ask your host researcher for help to make an application.

Application period

From 10 January 2024 to 31 January 2024

*Applications for Program for Utilization of Facilities and Equipment will be accepted even after the application period when there is a need to use facilities and equipment. In such case, please contact a host researcher or the office workers at each institute.

Notification of a result of an application

After deliberations on approval of applications by Joint Research Promotion Committee, applicants will be notified of the results of approval or rejection in April 2024.

Approved research projects will be put on the list of research projects on the NJRC's website along with PI's names and affiliations.

Submission of a Report on the Research Result

Please submit a report describing the progress and the results of research on the online system for open calls. The report will be published on NJRC's website after confirming PI's permission for publication.

*The closing date for submission is scheduled on March 30, 2025. Details will be informed as the date approaches.

Publication of the Research Results

When publishing the research results, please write sentences equivalent to 'This work was performed under the Cooperative Research Program of "Network Joint Research Center for Materials and Devices (MEXT)"'.

Handling of Intellectual Property Rights

When intellectual property is created during research, the ownership of intellectual property rights should be promptly discussed among researchers' institutions. In principle, allocations of rights will depend on degree of each researcher's contribution to inventions and so on.

Others

When there is a need to handle radioactive rays in each host institute to conduct joint research, please submit a certificate proving that you have been registered as a person who can handle radioactive rays issued by your affiliated institution.

*In the case your application of research program involves utilization of Research Laboratory for Quantum Beam Science at SANKEN, Osaka University, it is required to apply for an inquiry for safety use of radioactive rays through a website of Research Laboratory for Quantum Beam Science. (<http://osku.jp/z0170>) As the website is provided only in Japanese, please ask your host researcher for help to apply for it.

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