AY2023

Q-PIT Support Program for Young Researchers and Doctoral Students

Application Guidelines



Kyushu University Platform of Inter- / Transdisciplinary Energy Research

June 2023

1. Purpose

Kyushu University established the Platform of Inter-/Transdisciplinary Energy Research (Q-PIT) in October 2016 to harness our outstanding achievements in the field of energy, contribute to solving the increasingly serious global energy and environmental issues, and realize a sustainable society.

In November 2021, Kyushu University was selected as a Designated National University Corporation by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). Among priority initiatives is driving social change with leveraging the university's strength and characteristics for solving social issues, where one of the entry points is "decarbonization." Q-PIT is expected to play a role in driving social change and innovation as a platform of "integrative knowledge" that fuses different academic disciplines, and conducts advanced cross-disciplinary research and human resource development.

As a gateway to success, this program targets to identify and support young researchers, doctoral students who will play major roles in future energy research in society.

2. Details of Support

I. Young Researcher's Team Program

Research that fuses different disciplines to contribute to the realization of a decarbonized energy society (All fields from humanities and social sciences to natural sciences)

[Application Eligibility]

(1) The team is organized by two or more members.

(2) The team members must be associate professors, assistant professors, or academic researchers at Kyushu University who fall into one of the following categories.

- (i) 10 years or less since obtaining a doctoral degree as of April 1st, 2023.
- (ii) 20 years or less since obtaining a doctoral degree as of April 1st, 2023, for those who have been unable to devote themselves to research due to childbirth or childcare.
- (iii) 17 years or less since obtaining a doctoral degree as of April 1st, 2023, for those who have been unable to devote themselves to research due to caregiving or the like.

[Number of Projects to be Adopted] ~3

[Available Funds] ~ 1.5 million yen per project

[Regulations Regarding Expenses]

(1) <u>Covered Expenses</u>: Research expenses that can be covered include facilities/equipment, supplies, travel expenses, honorariums and other expenses required to carry out research. If facilities and equipment expenses for the research plan exceed 50 percent of the total expenses, the applicant must account for the necessity of such expenses in implementation of the research, by specifying it in the research plan. Research plans aimed only at purchasing facilities and equipment, etc. will not be adopted.

(2) <u>Expenses Not Covered</u>: The following expenses will not be covered, even if they are required for research:

- (i) Expenses related to buildings and other facilities.
- (ii) Purchases of office facilities/equipment such as desks, chairs, and copying machines that would be normally purchased by respective departments.
- (iii) Personnel expenses used to employ staff such as administrative assistants.

[Other Requirements]

(1) Applicants may not submit more than one proposal as a team leader at the same time. However, it is possible to be a team member in other applications.

(2) Members of the Q-PIT modules may apply for this program, but not with the same content as the module research.

[Support Period] April 1st, 2023 – March 31st, 2024.

II. Support for Doctoral Students

Projects will be accepted in the following five research areas:

- Area 1: Energy Technology
- Area 2: Energy Systems and Management
- Area 3: Environmental Energy Issues
- Area 4: Energy Economy, Society, and Policy
- Area 5: Other Energy Issues
- * This support is aimed at research projects in all energy-related fields, from humanities and social sciences to natural sciences. We recommend that you keep an open mind when applying, and refer to the "List of academic fields and keywords" in the appendix.
- * Please describe the contents of your research plan clearly and avoid complex terms, so that it can be understood by reviewers outside your specific field.

[Eligibility and Requirements]

- * Support is available to Doctoral students, as well as Master's students expected to join doctoral programs.
- * Those who have been previously supported by this Doctoral Support program twice, are not eligible to apply for a third time.
- * Those who are enrolled in the school until March 31, 2024 (or longer).

[Number of Awards and Amount of Support]

Gold Award:	~1	(500,000 yen)
Silver Award:	~2	(400,000 yen)
Bronze Award:	~3	(300,000 yen)
Encouragement Award:	~14	(200,000 yen)

[Expenses for Research and Further Education]

According to the rank of each award, expenses for research and further education will be offered to the laboratories to which the students who receive the award belong.

Please note that there are no restrictions on the use of research and education incentives, but efforts must be made to properly execute the expenses under the supervision of the affiliated laboratory.

* Please note that there is a limit to external support funds for research fellowships for young scientists at the Japan Society for the Promotion of Science. Any amount of support in this area will be within that limit.

[Support Period] April 1st, 2023 – March 31st, 2024.

3. Selection Procedure, Number of Adopted Research Projects and Date of Allocation

- (1) The selection process involves reviewing the applications and deciding which proposals are candidates for adoption.
- (2) The number of adopted projects may be adjusted according to the budget.
- (3) In the event of a tie between applicants who have never been selected and applicants who have been selected in the past, priority will be given to applicants who have never been selected.
- (4) Support expenses for the adopted research projects are allocated as of April 1, 2023.

4. Application Procedures

- (1) Application Deadline: Monday, August 21st, 2023
- (2) Application Documents
 - I. Young Research Team Program (FORM1) Research Application Overview (FORM2) Application Form

II. Support for Doctoral Students (FORM3) Research Application Overview (FORM4) Application Form

(3) How to Submit

The documents must be submitted through the administration office of your department. Please convert each application document to PDF format and name the file "FormX_Affiliation_Position_Name" or "FormX_Affiliation_Grade_Name" (e.g. FormX_Engineering_AssistProf_Hana Yamada or FormX_Engineering_M2_Taro Kyudai).

(4) Contact Information (Support Office) IQ Support Services Research Support and Public Relations Group e-mail: iq-kenkyu@jimu.kyushu-u.ac.jp Tel: 092-802-6934 (90-7196)

5. Requirements after adoption

(1) Public Relations

Awardees must be active in providing publicity for this program, for instance by openly specifying that the research has received support under this program in presentations, posters, and academic publications. The following is an example of an Acknowledgment.

This work was supported by Kyushu University Q-PIT Support Program for Young Researchers and Doctoral Students.

Moreover, awardees must actively cooperate with the efforts of Kyushu University (such as participating in exhibitions, seminars and symposiums) to make the research findings publicly available. When the project is adopted, awardees must give poster presentations in events hosted by Q-PIT, such as Energy Week.

(2) Application for KAKENHI / JSPS Program

Young Researcher awardees must apply for Grants-in Aid for Scientific Research (KAKENHI) or other competitive funding programs in the academic year of adoption or in the following academic year. This rule does not apply to those researchers who have already acquired such funding and will be limited by restrictions on duplicate funds if they newly apply for the program. The rule also does not apply to researchers who are not eligible to apply for other competitive funding programs. Doctoral Student awardees who are eligible to apply must apply for the research fellowship for young scientists of the Japan Society for the Promotion of Science in the year of the award, or the following year.

(3) Changes in the Research Plan

(FORM5) Statement of Reasons for Change should be submitted to the Support Office to obtain approval in the following cases:

- (a) If the awardee needs to abandon their project due to transfer to another institute, resignation, or some other reason.
- (b) The implementation of the research plan is proven too difficult.
- (c) Other than above, when the research plan changes significantly.
- (4) Reallocation of Expenses (Support for Young Researchers)

When reallocating over 50% of the total allocated expenses from one category to another, please submit (FORM6) Application for Approval for Change of Breakdown of Research Expenses to the Support Office and obtain approval in advance. Reallocation cannot be undertaken until the approval is obtained.

6. Report on Research Achievements

For adopted research proposals, at the end of each academic year, recipient researchers must report on the progress and results of their research by completing and submitting the (FORM7) (FORM8) Report on Achievements form by the due date (to be announced by Q-PIT). In addition, (FROM9) Expenses Report shall also be submitted by the administrative staff of the applicant's department.

7. Other Items

Patentable inventions made in the course of research conducted with support from this program will be handled in accordance with Kyushu University Intellectual Property Handling Rules (Kyushu University Rules No. 93, AY 2004).

For more information, refer to the website of the Academic Research and Industrial Collaboration Management Office: https://airimaq.kyushu-u.ac.jp/en/teacher/invention.php

<Appendix>

List of suggested academic fields and keywords of specialized fields pertinent to research areas (1-5)

Area 1: Energy Technology

- Relevant Fields: Science, Engineering, Mathematics, Chemistry, Materials Science
- <u>Specialized Keywords</u>: Hydrogen Production, Hydrogen Storage, Water Electrolysis, Fuel Cells, Batteries, Energy Storage Materials, Energy Conversion Materials, Photovoltaics / Solar Materials

Area 2: Energy Systems and Management

- <u>Relevant Fields</u>: Information Technology, Systems Engineering, Control Engineering, Engineering Management, Process System Engineering, Energy System Engineering, Chemical System Engineering, Mechanical Engineering, Electrical Engineering; Renewable Energy Utilization Systems; Hybrid Renewable Energy Systems
- <u>Specialized Keywords:</u> Data Analysis, Modeling, System Integration, Energy Storage Systems, Local Energy Systems, Low-carbon Society, Techno-Economic Assessment

Area 3: Environmental Energy Issues

- Relevant Fields: Agricultural Sciences, Environmental Science,
- Specialized Keywords: Generation of Bio-Derived Energy, Measures Against Global Warming

Area 4: Energy Economy, Society, and Policy

- <u>Relevant Fields:</u> Energy Economics, Resource Economics, Environmental Economics, Sociology, Energy Policy
- <u>Specialized Keywords:</u> Smart Farm, Energy Issues in Developing Countries, Energy-Saving, Energy Creation, and Energy Storage Technologies, Distributed Energy Society

Area 5: Other Energy Issues

- Other Fields