

## **2023 Osaka University Fellowship “Quantum Leader Resources” (QLEAR Fellowship)**

### **Application Guidelines for Second-Year (DC2) Students**

**Students enrolled in the second year of a regular doctoral course or the third year of a four-year doctoral course as of April 1, 2023 are eligible to apply!**

#### 1. Outline

This is a doctoral program that will provide allowance and research funds and secure posts that can provide a stable and devoted environment for research after completing the doctoral program to those who have strong motivation for research and will be important players leading leaders innovation in the science and technology in Japan in future as a part of the “University Fellowship Program for the Creation of Innovation in Science and Technology” by the Ministry of Education, Culture, Sports, Science and Technology. This program will broadly/widely support many doctoral students involved in cutting-edge quantum research promoted at Osaka University. We will provide a research environment where they can concentrate more on their research and achieve world-class research results. Through joint research with companies and related research institutes, we will improve their research capabilities and secure career paths.

#### 2. Goal

Through the activities of this fellowship program, the fellowship students will gain a high expertise in “Quantum” and build a spirit of industry-academia collaboration, who are expected to lead innovation in the social implementation of quantum research in various fields of society in future. The word “Quantum” refers to the area dealing with quantum mechanical phenomena and/or their applications, such as “Quantum Information”, “Quantum Technology”, “Quantum Biology”, “Quantum Beam Applications”, and so on.

#### 3. Activities

Fellowship students (hereafter QLEAR fellowship students) will be required to participate in the following activities.

- (1) Research Internship (about three months): QLEAR fellowship students will take the initiative in conducting joint research with companies and research institutes to improve their research skills. The period of the internship will be flexibly adjusted in consideration of the situation and various circumstances.
- (2) Quantum Basic Lectures (15 lectures a year): QLEAR fellowship students should take special lectures of quantum science and technology that will be provided by prominent researchers from Osaka University, Japan and overseas.
- (3) Researcher Exchange Workshop (once a year): QLEAR fellowship students must report their achievements and promote exchange and communications with outside parties.
- (4) Quantum Career Fair (exchange meeting with companies and research institutes) [held once a year]: QLEAR fellowship students participate in the Quantum Career Fair (exchange meeting with companies and research institutes) to deepen exchange with researchers from companies and research institutes, get a specific image of their career path, and find a match among the other parties.
- (5) Interviews with a mentor (once every four months): Researchers in Osaka University and at companies and research institutes become mentors, and regularly meet with QLEAR fellowship students to report your progress.
- (6) Support for overseas joint research: Every year, one or two proposals will be adopted through a selection process, and support (about 500,000 yen) is provided for joint research between QLEAR fellowship students and overseas quantum technology research centers.

Note: Those who are already enrolled in Osaka University Program for Leading Graduate Schools, Multidisciplinary PhD Program or Honor Program for Graduate School in Science, Engineering and Informatics will consult after hiring about the implementation of the above program.

#### 4. Human resources required.

We recruit the students who will work actively on cutting-edge research of quantum science and technology during doctoral course and will study to be a quantum leader through this program and have strong motivation for working on research related quantum science and technology after the graduate course, in the future, and moreover for contributing to a society through quantum technology innovation.

#### 5. Capacity

Approx. 5 students

#### 6. Eligibility for application

Students who satisfy the following criteria (1) and (2) can apply to the fellowship program, provided they commit to engaging fully in their research activities in accordance with their research plans and completing the activities (1) to (5) shown in “3. Activities.”

- (1) Students who entered a doctoral course of Osaka University listed in the table below in April 2022 or October 2021 and are in their second year as of April 1, 2023. For the four-year doctoral course of the Graduate School of Medicine, students who entered in April 2021 or October 2020 and are in their third year as of April 1, 2023.
- (2) Students who are neither accepted for or currently receiving Osaka University fellowships nor the Support for Pioneering Research Initiated by the Next Generation.

Curriculum	Graduate School • Department
Doctoral course	Graduate School of Science (Department of Mathematics, Department of Physics, Department of Chemistry, Department of Biological Science, Department of Macromolecular Science, Department of Earth and Space Science) Graduate School of Medicine (Division of Health Science) Graduate School of Engineering (Division of Biotechnology, Division of Applied Chemistry, Division of Precision Engineering and Applied Physics, Division of Mechanical Engineering, Division of Materials and Manufacturing Science, Division of Sustainable Energy and Environmental Engineering, Division of Electrical, Electronic and Intercommunication Engineering, and Department of Management of Industry and Technology) Graduate School of Engineering Science (Department of Materials Engineering Science, Department of Mechanical Science and Bioengineering, and Department of Systems Innovation) Graduate School of Information Science and Technology (Department of Information Systems Engineering, Department of Computer Science, and Department of Information Networking)
4-year doctoral course	Graduate School of Medicine (Medicine)

Note) The students who are already enrolled in Osaka University Program for Leading Graduate Schools, Multidisciplinary PhD Program or Honor Program for Graduate School in Science, Engineering and Informatics can apply to the fellowship.

Persons who falls under at least one of the following categories as of April 1, 2023 (the start date of the fellowship program) are not eligible to register for the fellowship. Students who are trying to terminate (decline) the scholarships listed below by April 1, 2023 or have not been confirmed the acceptance of the scholarships listed below (unofficial decision) at the time of the application are able to apply for this fellowship. When students who have already applied for any scholarships or accepted as a recipient would like to apply for the fellowship, please contact the student centers (Japanese students) or the administrative office for the department (international students) before submitting the application documents for the fellowship.

- (1) Research Fellowship for Young Scientists (DC) of Japan Society for the Promotion of Science
- (2) Recipient of a scholarship from overseas governments
- (3) Recipient of Japanese Government (MEXT) Scholarship
- (4) Students who receive a scholarship from a graduate program conducting in Osaka University (Multidisciplinary PhD Program,

Program for Leading Graduate School, Honor Program for Graduate School in Science, Engineering and Informatics).  
However, the scholarships to support tuition waiver and reduction are excluded.

#### 7. Period

24 months from April 1, 2023

※The period will be ended when one will be withdrawn or removed from the doctoral course during the period.

For those who entered the above mentioned doctoral courses in October, the duration for receiving the fellowship will be 18 months.

#### 8. Support

QLEAR fellowship students will be provided with an allowance and research budget to carry out research activities to focus on the proposed research theme described in the application form / plan. The amount for FY2022 is as follows.

(1) Allowance : 180,000 JPY per month

(Occasionally, amount for several months may be paid at once.)

(The allowance is subject to taxation. See 13. below)

(2) Research budget : 340,000 JPY per year

(The budget will be transferred to the graduate school or institute in which the student's supervisor belongs.)

Note: In the event that a student cannot arrive in Japan by the fellowship start date, the allowance will not be paid for the period during which the student remains outside Japan. However, the student may use the research budget after arriving in Japan.

#### 9. Application procedures

Students who satisfy "6. Eligibility for application" and wish to apply for this fellowship should follow the procedure below.

- Method for application . . . . Electronic application
- Application period . . . . **Saturday, April 1, 2023 to Monday, April 10, 2023**
- Application documents . . . . Documents ①~⑥ listed in "10.Application documents"

Document ⑦ (Recommendation Letter) must be distilled into PDF and the PDF file will be sent directly to QLEAR Office by the recommender with NII file sender. (for the procedure to send the PDF file, please refer to [Electronic application method] and ⑦ in "10.Application documents" below).

[Electronic application method]

1) Please fill in the required items on the application documents and convert them to PDF.

**Do not** check "Editing is restricted" when converting.

Capture the transcript and English proficiency test certificate with a scanner and so on, then distill them to PDF.

2) When sending them, the respective pdf files of application documents ① to ⑥ are named "First name and last name-1.pdf" to "First name and last name-6.pdf".

3) Please send them to [qclearoffice@qiqb.osaka-u.ac.jp](mailto:qclearoffice@qiqb.osaka-u.ac.jp) by NII FileSender (<https://filesender.nii.ac.jp/>).

After sending the application documents by NII FileSender, please contact at QLEAR Support office ([qclearoffice@qiqb.osaka-u.ac.jp](mailto:qclearoffice@qiqb.osaka-u.ac.jp)) by e-mail that the application documents have been sent.

To protect personal information, please be sure to use NII FileSender without attaching it to e-mail. Not accepting the application if the applicant does not use NII FileSender for Electronic Application.

Please note that NII File Sender is a large volume file transfer service provided by the National Institute of Informatics.

The file is encrypted and stored on the server and is protected by SSL encrypted communication.

To use it, you will need your Osaka University personal ID and password. For details on how to use it, refer to the manual below.

How to use NII FileSender: [https://www.andrew.ac.jp/c-center/pdf/SAINT/NIIFileSender\\_manual.pdf](https://www.andrew.ac.jp/c-center/pdf/SAINT/NIIFileSender_manual.pdf)

Login method by academic certification federation: <https://web.auth.osaka-u.ac.jp/gakunin/ds-login.html>

If the applicants would not be able to send the application documents using NII FileSender, please contact your supervisor and follow the instructions.

#### Notes

- Use the official format for the application. The change of the style in the format is strictly prohibited.
- Changing the contents of application documents and adding supplementary after the submission are not accepted.
- Every applicant can submit only one application. Parallel application to Osaka University fellowships is not allowed. When the several applications are submitted from an applicant, all applications will be invalid.
- Examination voucher with examinee ID will be sent to the applicant either by e-mail or by postal mail using the submitted envelope after submission.
- Deficient application documents will not be accepted.

#### 10. Application documents

Please submit the following documents for application to the fellowship program.

The forms can be downloaded from the QLEAR Fellowship website (URL: <https://qlear.qiqb.osaka-u.ac.jp>).

	Document	Contents and Notes
①	QLEAR Fellowship Application Form (Form 1)	Please fill the prescribed form.
②	QLEAR Fellowship Statement of Reasons (Form 2)	Please fill the prescribed form according to the instructions in the notes.
③	QLEAR Fellowship Research Plan (Form 3)	Please fill the prescribed form according to the instructions in the notes.
④	Academic transcript for graduate course	1. Those who belong to the second year of a regular doctoral course as of April 1, 2023 must submit the academic transcript issued upon completion of the master course. 2. Those who belong to the third year of the Graduate School of Medicine (Medicine) as of April 1, 2023 must submit the academic transcript for their first and second year in the Graduate School of Medicine.
⑤	Copy of official certification of language proficiency	Only for those who write a score of the language proficiency in Form 1.
⑥	Examination voucher with photo (Form 4)	Post a portrait taken within three months.
⑦	Recommendation Letter (Form 5)	Applicant asks the recommender to send it directly to the QLEAR fellowship office with NII file sender. *Applicants shall send Form 5 to their supervisor for April 2023 onwards and ask their supervisor to send the completed form directly to the QLEAR fellowship office via the [Electronic application method]. 詳細は様式5に記載の説明を参照してください。

#### 11. Screening procedure

The selection of the fellowship students will be carried out by documentation review and interview.

• Selection schedule

Process	Date	Time	Location
Submission	Saturday, April 1 to Monday, April 10		Submitting electronic application to QLEAR Support Office
Notification of result of the document screening	Friday, May 12	14 : 00	QLEAR Fellowship website
Interview	Monday, May 22 to Wednesday, May 24 (The schedule may change with notice.)	Announced separately	Announced separately
Notification of final successful applicants	Thursday, May 25	14 : 00	QLEAR Fellowship website

• Selection Policy

The first screening will be examined by application form, statement of reasons, research plan, recommendation letter and academic transcript.

• Notes for selection

The interview (including a presentation) will be performed only for those who are subjected. The applicants subjected to the interview and the details of the interview will be announced on the program website.

• Notification of final successful applicants

The final successful applicants will be announced by publishing their examinee ID on the fellowship website (URL: <https://qlear.qiqb.osaka-u.ac.jp>) at 14:00 on Thursday, May 25, 2023, and an e-mail will be sent to the e-mail address written in the application form. We do not accept individual inquiry for the results or selection by phone call or e-mail.

## 12. Administration procedure

After the notification of the final successful applicants, the pledge and transfer request form will be submitted to the fellowship office. The pledge is for ensuring that you meet the criteria stated in **【6. Eligibility of application】**. The details will be announced after the notification of final successful applicants.

## 13. Obligations and notes for fellowship students

QLEAR fellowship students have the following obligations.

- (1) Submit pledge every year during the fellowship period.
- (2) Allowance (the research devotion support fund) is treated as taxable income (miscellaneous income) and is subjected to taxation. You must declare and pay tax by yourself.
- (3) Research budget should be used appropriately under the control of the university.
- (4) Fellowship students must focus on the research activities based on the research plan.
- (5) Fellowship students must conduct the research internship.

- (6) Fellowship student must take the Basic Quantum Lectures.
- (7) Fellowship students should participate in the visits to companies and research institutes.
- (8) Fellowship students must present achievements in the research exchange meeting.
- (9) Fellowship students should have an interview regularly with a mentor.
- (10) Fellowship students should have an interim presentation on second year and a final presentation on third year.

#### 14. Handling of personal information

(1) The name, address, and other personal information submitted at the application are used only for the works such as “selection of fellowship students (application procedures and execution of selection examinations”, “Result publication”, and “Administration procedures” etc., and the works related in Quantum Leader Resource Fellowship Program.

(2) Personal information used for the selection of fellowship students, such as test results will be used for aggregation and analysis of the selection results and investigation and research of the method of the fellowship student selection.

(3) In the case of approval, your name and other information will be appeared in the fellowship website.

(4) For carrying out the above 1. .2. and 3. operations, there is a possibility that some of the operation will be entrusted to the outside companies. In this case we with provide all or part of the submitted personal information to the company after making a contract with the company so that the submitted personal information will be handled appropriately.

#### 15. Others

(1) If you have physical disabilities and wish to take special consideration for the examination, please contact to QLEA Fellowship office before an application.

(2) We may request a cooperation to follow-up survey of carrier paths for those who have finished the fellowship program.

(3) Osaka University Fellowship “Quantum Leader Resource” welcomes the applications of motivated female students based on the “Osaka University Gender Equality Promotion Declaration”. <http://www.danjo.osaka-u.ac.jp/president-message/www.danjo.osaka-u.ac.jp/president-message/>.

(4) The application documents will not be returned to you.

(5) If false information is found in the application documents, the hiring may be canceled even after the hiring.

#### 【Contact】

QLAER Support Office

10:00 to 16:00, Monday to Friday (excluding national holidays)

TEL06-6850-6155

E-mail: [qlearoffice@qiqb.osaka-u.ac.jp](mailto:qlearoffice@qiqb.osaka-u.ac.jp)

[QLEAR FY2023 Second Year Applicants ver. 2]