

## **2024 Osaka University Fellowship “Quantum Leader Resources” (QLEAR Fellowship) Advance Recruitment Screening Application guideline**

### 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 a 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) Company/research institute visits (twice a year): QLEAR fellowship students visit companies and research institutes to get an image of the career path and have an opportunity to make contact with other institutions and companies.
- (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 to support joint research between QLEAR fellowship students and overseas quantum technology research centers (about 500,000 yen).

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

10 students (approximately)

## 6. Eligibility for application

Students who, at the time of appointment on 1 April 2024, fulfill both conditions (1) and (2) below may apply for this fellowship providing that they are committed to their research activities based on their research plan and participate in items (1) to (5) in item “3. Activities” above.

- (1) Students who are expected to enter a doctoral course of Osaka University listed in the table below in April 2024 or in October 2023 and are supposed to be enrolled in the first year on 1st April 2024 are eligible. ※ 1

※ 1 The students who would enroll either in April 2023 or in October 2022 and belong as the 2nd year of the doctoral course for Graduate School of Medicine on 1st April 2024.

- (2) Applicants who are neither successful applicants nor recipients of the Osaka University Fellowship program, nor successful applicants or recipients of 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.

Students who meet at least one of the following criteria on April 1, 2024 (the start date of the fellowship program) are not eligible to register the fellowship. Students who are trying to terminate (decline) the scholarships listed below by April 1, 2024, or have not 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

36 months from 1<sup>st</sup> April 2024

※ The period will be ended when one will be withdrawal or removal from the doctoral course during the period.

For those who are enrolled in the above-mentioned doctoral courses on the day for 31st March 2024, the duration for receiving the fellowship will be in 30 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 based on FY2022 is as follows. The budget for FY2024 is unsettled.

- (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. blew)
- (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.)

## 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 . . . . by electronic application
- Application period . . . . (Thu) 1<sup>st</sup> December, 2022~ (Sun) 11<sup>th</sup> December 2022
- 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 the [Electronic application] and "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 restrict editing when converting (Please do not check "Editing is restricted").  
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 [qlearoffice@qiqb.osaka-u.ac.jp](mailto:qlearoffice@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 ([qlearoffice@qiqb.osaka-u.ac.jp](mailto:qlearoffice@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.

When the applicants do not belong to Osaka University, choose the name of the institution the applicants belong to on the institution selection screen, and the user ID and password specified by the institution the applicants belong to.

When the name of institution that the applicants belong to do not shown, please have your supervisor for April 2024 onward send the application to [qlearoffice@qiqb.osaka-u.ac.jp](mailto:qlearoffice@qiqb.osaka-u.ac.jp) following the [Electronic application method].

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 to send the application documents using NII file Sender, please contact your supervisor and follow the instruction.

### 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.
- Examination voucher with examinee ID will be sent to the applicant by NII FileSender.
- 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/?lang=en>).

	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	<p>① Applicants for admission (advancement) to the doctoral program Please submit one copy of each of the following two types of transcripts.</p> <p>1. Transcript of final academic background before entering graduate school * For those who graduated from KOSEN (National Institute of technology and other colleges of technology) please submit the transcripts of both the fundamental course and the advanced course, and for the students who transferred the third year of university, please also submit the transcripts of the educational institution where they were enrolled before the transfer.</p> <p>2. Graduate school transcript</p> <p>② Applicants for admission (advancement) to the Graduate School of Medicine (Medical) Transcript of final academic background before entering graduate school of Medical</p>
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)	<p>Applicant asks the recommender to send it directly to the QLEAR fellowship office with NII file sender.</p> <p>※2024 年4 月以降の指導教員の方へ 指導教員から記入後の様式5をQLEAR 支援室へ、【電子申請】により直接送付してください。詳細は様式5に記載の説明を参照してください。</p>

## 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	(Thu) 1 <sup>st</sup> December 2022 ~ (Sun) 11 <sup>th</sup> December 2022		Submitting by electronic application to QLEAR Support Office
Notification of result of the document screening	(Fri) 13 <sup>th</sup> January 2023	14 : 00	QLEAR Fellowship website
Interview	(Mon) 23 <sup>rd</sup> January 2023 ~ (Wed) 25 <sup>th</sup> January 2023 (The schedule may change with notice.)	Announced separately	Announced separately
Notification of final successful applicants	(Fri) 27 <sup>th</sup> January 2023	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

Notification of the final successful applicants will be announced on the fellowship website (URL: <https://qlear.qiqb.osaka-u.ac.jp>) at 14:00 on (Fri) 27th January 2023 and will be sent also by e-mail 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 the middle of March 2024 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. Benefits for students with Advance Recruitment Screening

Those who are accepted for this fellowship will receive the following benefits in FY2023.

- (1) Students are allowed for lecture attendance of the Quantum Basic Lectures (15 lectures a year)
- (2) Students are allowed to attend for Researcher Exchange Workshop in March 2023.

#### 14. 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. However, students who attend the Basic Quantum Course in 2023 are exempt from this requirement.
- (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.

#### 15. 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 homepage.

(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 will 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.

#### 16. Others

- (1) If you have physical disabilities and wish to take special consideration for the examination, please contact to QLEAR 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】

QLEAR Support Office

Monday to Friday except national holidays from 10:00 to 16:00

TEL06-6850-6155

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

[QLEAR FY2024 advance]