

2021 Osaka University Fellowship “Quantum Leader Recourses” (QLEAR Fellowship) Application guideline

1. Outline

This is a doctoral program that will provide research devotion support funds and research funds and secure posts that can provide a stable and devoted environment for research after completing the doctoral program to those who has strong motivation for research and will be an important player 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. In 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, and 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 programs, we will train quantum leaders who have a high expertise in "quantum" and a spirit of industry-academia collaboration, and who will lead innovation in the social implementation of quantum research in various fields of society in future.

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 conduct 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 will be provided by prominent researchers from Osaka University, Japan and overseas.
- (3) Researcher Exchange Workshop (once a year): QLEAR fellowship students must report the achievements and to 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 making matchings to the other party.
- (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 already enroll 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 strongly 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

25 students

6. Eligibility for application

The students who can apply to the fellowship program should satisfy the criteria listed below.

- (1) Students who enter a doctoral course of Osaka University listed in the table below in April 2021 or entered there in October 2020 and enroll in the first year on 1st April, 2021 are eligible. ※ 1
 ※ 1 2nd year of the doctoral course of Graduate School of Medicine on 1st April, 2021
- (2) Students who are less than 30 years old at 1st April, 2021 (less than 33 years old for those who belonged to a medical course including a clinical training.)

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 Infocommunications 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 ※ 1	Graduate School of Medicine (Medicine)

Note) The students enroll 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.

However, students listed below on 1st April, 2021 are not eligible.

- (1) Person who are recognized as a working person ※2
- (2) Research Fellowship for Young Scientists (DC) of Japan Society for the Promotion of Science
- (3) Recipient of a scholarship from Japan Student Service Organization
- (4) Recipient of a scholarship from overseas governments
- (5) Recipient of Japanese Government (MEXT) Scholarship
- (6) 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). ※3

But the scholarship aiming to supporting the tuition fee are excluded.

※2 Working person” means 1. a person in full time employment, 2. a person retired from the full-time employment, and 3. a housewife and a househusband. For 3. However, regarding 3, depending on the status of life, we may not consider the applicant as a working person, and may accept the eligibility of application.

※3 Even if you receive the scholarships shown in (6), you can apply if you decline to receive the scholarship before the allowance payment from the fellowship program will start. In this case, the allowance will be paid by subtracting the amount equivalent to the scholarship paid in the first year of the fellowship.

7. Period

Three years from 1st April, 2021

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

The period for those who are enrolled in the abovementioned doctoral courses on 31st March, 2021 is two years and six months.

8. Support

QLEAR fellowship students will be provided with a research devotion support fund (allowance) and research budget to carry out research activities to focus on the proposed research theme described in the application form / plan. The amount to be paid in 2021 is as follows.

The funds for 2021 is as follows.

- (1) Allowance : 1,800,000 JPY per year
 (Basically one twelfth of the total allowance will be paid every month. However, occasionally amount for several months may be paid at once.)
 (The allowance is taxation. See 13. blew)
- (2) Research budget : 700,000 JPY per year
 (The budget will be transferred to the graduate school or institute where his or her supervisor belongs.)

9. Application procedures

Students who satisfy “6. Eligibility for application” and wish to apply for a fellowship should follow the procedure below.

- Method for application By mail
- Application period 6th. April, 2021 (Fri) ~ 21th. April, 2021 (Fri)
- Application documents Documents ①~⑦ listed in “10.Application documents”
 ⑧ Recommendation Letter will be sent by the recommender to the address below by mail (or on-campus mail).
- Mailing method
 Address 8-1 Mihogaoka, Ibaraki, 567-0047 Osaka
 QLEAR Fellowship Office
 Room N209 Department of Quantum System Electronics, The Institute of Scientific and Industrial Research,
 Osaka University
 Please use an envelope of “角形/Kakugata2 号(about length 33 cm × width 24 cm size), and be sure to send it by “簡易書留速達/Kani-Kakitome-Sokutatsu (Simple registered express mail)”. (Only those with a postmark from sending station (domestic) before 12th April (Fri) will be accepted even if they arrive after the deadline.)

Notes

- Use the official format for the application. The change of the style in the format prohibited.
- Changing the contents of application documents and adding supplementary after the submission are not allowed.
- One application is accepted from an applicant and multiple applications are not allowed. When the several applications are submitted from an applicant, all applications will be invalid.
- Examination voucher with examinee ID will be mailed to the applicant by 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://qiqb.osaka-u.ac.jp/qlear/>).

	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 1st year of the doctoral course on April ,2021 must submit the academic transcript for master course. 2. Those who belong to the 2nd year of Graduate School of Medicine (Medicine) must submit the academic transcript for the 1st year.
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	Envelop for returning examination voucher	A “ Rectangular type 3(長形/Naga3 号)” envelope written with your mailing address and a 94yen stamp.
⑧	Recommendation Letter (Form 5)	The recommender sends it directly to the QLEAR fellowship office.

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	6th April (Tue) ~ 21 th April (Wed)		To QLEAR Fellowship Office (in the Institute of Scientific and Industrial Research)
Notification of result of the document screening	11th May (Tue)	14 : 00	QLAER Fellowship homepage
Interview	Announced separately	Announced separately	Announced separately
Notification of final successful applicants	25th May (Tue)	14 : 00	QLEAR Fellowship homepage

• 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 homepage.

• Notification of final successful applicants

Notification of the final successful applicants will be announced in the fellowship homepage (URL: <https://qiqb.osaka-u.ac.jp/qlear/>) at 14:00 on 25th May, 2021 and will be sent also by email to the email address written in the application form. We do not accept individual inquiry for the results or selection by phone call or email.

12. Administration procedure

After the notification of the final successful applicants, the pledge and transfer request form will be submitted quickly to the fellowship office. The pledge is for ensuring that you meets 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 students should participate in the visits to companies and research institutes.
- (7) Fellowship students must present achievements in the research exchange meeting.
- (8) Fellowship students should have an interview regularly with a mentor.
- (9) Fellowship students should have an interim presentation on second year and a final presentation on third year.
- (10) Fellowship students should take a special lecture for quantum basics

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 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.

15. Others

(1) If you have physical disabilities and wish to take special consideration for the examination, please contact to QLERA 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 Fellowship Office

Room N209 (Department of Quantum System Electronics), The Institute of Scientific and Industrial Research, Osaka University

8-1 Mihogaoka, Ibaraki, 567-0047 Osaka

TEL06-6879-8405 & FAX: 06-6879-8405

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