April 2026 Enrollment

Graduate School of Chemical Sciences and Engineering
Hokkaido University

Master's Degree Program
(Master's Course)

〔2nd Round of Application〕

Application Guidelines

(Including International Student Admission Information)

If you have any questions regarding the application process, contact the office below.

Administration Office, Graduate School of Chemical Sciences and Engineering,
Hokkaido University (CSE Office)
Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628 Japan
Tel: +81-11-706-7247 c-sougou@cse.hokudai.ac.jp

October 2025

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Overview of the Graduate School of Chemical Sciences and Engineering and the Division of Chemical Sciences and Engineering

Hokkaido University reorganized the Department of Chemistry in its Graduate School of Science along with three chemistry-related divisions in its Graduate School of Engineering (the divisions of Chemical Process Engineering, Biotechnology and Macromolecular Chemistry, and Materials Chemistry) to form the Graduate School of Chemical Sciences and Engineering and the Division of Chemical Sciences and Engineering in April 2010 (admission quotas in master's course: 129; admission quotas in doctoral course: 38).

In the Graduate School of Chemical Sciences and Engineering, chemistry and biochemistry professors of science and engineering who are affiliated with the Faculty of Science, Faculty of Engineering, Research Institute for Electronic Science, Institute for Genetic Medicine, Institute for Catalysis, and the Institute for Chemical Reaction Design and Discovery work closely together on research and education activities. Researchers affiliated with the National Institute for Materials Science and National Institute of Advanced Industrial Science and Technology, and RIKEN participate as instructors in related fields. These diversely experienced instructors offer not only specialized lectures in the Molecular Chemistry and Engineering Course, Materials Chemistry and Engineering Course, and Biological Chemistry and Engineering Course established within the Division of Chemical Sciences and Engineering but also a rich diversity of classes, including lectures in English. As a result, they are able to provide instruction and research guidance so that students will be able to view the field of chemistry from both the perspectives of science and engineering and contribute to society in related fields.

Admission Policy

1. Educational goals

By providing a systematic education that integrates research findings into the various fields of chemistry, such as molecular chemistry, materials chemistry, and biochemistry, the Graduate School of Chemical Sciences and Engineering strives to equip students with both basic and advanced, specialized knowledge in the field of chemistry; to cultivate individuals with broad-based knowledge, a strong sense of discernment, and the ability to use their knowledge in practical applications to meet the needs created by trends toward internationalization, advanced developments in science and technology, and interdisciplinary approaches; and to nurture students who have the depth of knowledge and skills necessary for conducting basic and applied research and who will therefore be well equipped to conduct innovative research going forward.

2. Ideal student image

(Master's Course)

(1) Knowledge/skills

Prospective students are expected to have previously acquired advanced expertise in chemistry or related fields and undertaken original research and development.

(2) Critical-thinking, judgment, and expressive abilities

To respond to internationalization, the sophistication of science and technology, and interdisciplinization, the Graduate School requires prospective students to possess not only a basic background in related fields but also the motivation to acquire diverse knowledge and develop critical thinking, judgment abilities, and practical abilities.

(3) Collaboration

Prospective students are expected to be independent and motivated to learn and work in collaboration with people from various backgrounds.

(4) Prerequisites

Before enrolling in the Graduate School, students are expected to have knowledge and abilities at the undergraduate level in chemistry or related fields.

(Doctoral course)
(1) Knowledge/skills
Prospective students are expected to have previously acquired advanced expertise in chemistry or related fields and undertaken original research and development.
(2) Critical-thinking, judgment, and expressive abilities
To respond to internationalization, the sophistication of science and technology, and interdisciplinization, the Graduate School requires prospective students to possess not only a basic background in related fields but also the motivation to acquire diverse knowledge and develop critical thinking, judgment abilities, and practical abilities.
(3) Collaboration
Prospective students are expected to be independent and motivated to learn and work in collaboration with people from various backgrounds.
(4) Prerequisites
Before enrolling in the Graduate School, students are expected to have acquired knowledge and research abilities at the master's level in chemistry or related fields.

3. Basic policy for admission selection
At the Graduate School of Chemical Sciences and Engineering, we admit students who desire to specialize in the fields of science and engineering and obtain a master's or doctoral degree in the field of general chemistry, as well as students who seek a doctoral degree while working. Details such as the evaluation method are specified in the application guidelines. To measure language proficiency, which is indispensable for success on the international stage, we request the submission of scores for an English test that is conducted globally.

(1) Master's program
・ General selection
Besides requiring comprehensive academic abilities related to the basics of chemistry, we conduct written and oral examinations related to specialization; evaluate basic specialized subjects in molecular chemistry, material chemistry, and biochemistry; and evaluate advanced, specialized knowledge in specialized subjects, as well as judgment ability and level of proficiency in the background of related fields, to ascertain practical ability. In addition, through oral examinations, we evaluate candidates' attitude of independence, willingness to collaborate with diverse people, motivation for the future, and ability to learn and research at the undergraduate level. Selection will be made by comprehensively judging the examination results, including language ability based on the English test score.
The written test may be exempted for those who have demonstrated excellent academic performance at their previous academic institution or who have outstanding achievements, such as research and development at companies.
・ Entrance examination for international students
Considering the level of education overseas, we evaluate expertise and operational ability in basic or related fields of chemistry through an oral examination. Prospective students are expected to have an attitude of independence, be willing to collaborate with various people, and have motivation for the future. Language ability will also be evaluated based on the score of the English test.

(2) Doctoral program (general selection / examination for working adults / international student selection/ AGS selection)
An oral examination is conducted to evaluate expertise and operational ability in chemistry and related fields, as well as basic research abilities for advancing original research in the doctoral program, with the addition of presentation ability. Prospective students are expected to have an attitude of independence, be willing to collaborate with various people, and have motivation for the future. Language ability will also be evaluated based on the score of the English test.

I. General Admission

1. Admission Quotas

Division	No. of Admission Quota	Graduate School Web Site
Chemical Sciences and Engineering	Several	www.cse.hokudai.ac.jp

Note:

Please contact the research advisor of your first choice Research Lab for details about research field prior to your application.

2. Application Qualifications

(1) Individuals who have graduated or are expected to graduate from a Japanese university by March 2026

(2) Individuals who have been awarded or expect to be awarded a bachelor's degree pursuant to Article 104, Clause 7, of the School Education Act (Act No. 26, 1947) by March 2026 (hereinafter referred to as "individuals with a bachelor's degree from the National Institution for Academic Degrees and University Evaluation")

(3) Individuals who have completed or are expected to complete 16 years of school education in a foreign country by March 2026 (hereinafter referred to as "individuals from a foreign educational system")

(4) Individuals who have completed or are expected to complete 16 years of school education of a foreign country by taking a correspondence course in Japan offered by a school of that foreign country by March 2026 (hereinafter referred to as "individuals from a foreign educational system via correspondence course")

(5) Individuals who have completed a coursework of a foreign university at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course or who are expected to complete such coursework by March 2026 (The completion of the coursework needs to be considered equivalent to the completion of 16 years of school education in that foreign country. In addition, the educational institution is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology.)

(Hereinafter referred to as "individuals who have completed coursework in a school designated as equivalent to a university")

(6) Individuals who have received, or are expected to receive by March 31, 2026, a degree equivalent to a bachelor's degree from a university or a school in a foreign country (which has been evaluated by an authority certified by the government of the country concerned or an authority concerned in regard to the overall performance of its education and research activities, or which has been separately designated by the Minister of Education, Sports, Science and Technology as an educational establishment equivalent to the above) upon completion of a program or a course of study requiring 3 or more years (including completion of a correspondence course of a foreign institute taken in Japan, and completion of a course of study designated in the preceding item at a foreign educational establishment within the public education system of the country concerned).

(7) Individuals who have completed a specialized course at a specialized training college on or after the date determined by the Japanese Minister of Education, Culture, Sports, Science, and Technology (The course must be designated by the minister, and the course term must be four years or more. It also must meet other standards established by the minister.) and individuals who are expected to complete such a course by March 2026.

(8) Individuals designated by the Minister of Education, Culture, Sports, Science, and Technology

(1953 Notice No. 5, Ministry of Education, Science and Culture)

(9) Individuals who, by March 2026, have attended a Japanese university for three years or more or individuals who, as of March 2026, meet one of the following:

- Those who have completed 15 years of school education in a foreign country
- Those who have completed 15 years of school education of a foreign country by taking a correspondence course in Japan offered by a school of that foreign country
- Those who have completed a coursework of a foreign university at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course (The completion of the coursework needs to be considered equivalent to the completion of 15 years of school education in that foreign country. In addition, the educational institution is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology)

Furthermore, all individuals who apply to this qualification need to be deemed by this graduate school to have achieved excellent grades in the subjects prescribed by Hokkaido University (hereinafter referred to as "individuals who apply through the early admission system").

(10) Applicants who are recognized by the graduate school as possessing the equivalent or greater academic skill as that of a Japanese university graduate based on an individualized admission qualification investigation and who will be 22 years of age as of March 31, 2026 (hereinafter referred to as "individuals who apply through an individualized admission qualification investigation")

Notes:

If you have any questions regarding the application qualifications, contact the Administration Office of the Graduate School of Chemical Sciences and Engineering (hereafter referred to as "CSE office").

3. Preliminary Review of Application Qualifications (Application Period, Etc.)

November 17 (Mon.) 9:00 a.m. – November 20 (Thu.) 5:00 p.m., 2025 (Japan Standard Time)

We will conduct a preliminary review of application qualifications before the admission examination if applicants fall under one of the following categories:

(7) Individuals who have completed a specialized course at a specialized training college

(9) Individuals who apply through the early admission system

(10) Individuals who apply through an individualized admission qualification investigation

Individuals who fit one of the above-mentioned descriptions should submit Application Form of Preliminary Review of Qualifications and Resume (prescribed forms) and documents indicated in section 5, "Application Documents," with the exception of item No. 1 (Admission application, resume, examination admission card, and examinee photo card), No.6 (English score reporting form and the score sheet of an English-language proficiency examination) , No.7 (Envelope in which the examination admission card is to be mailed), and No.8 (Envelope to be used for the notification of examination results and other information) to the address specified in section "6. Where to Apply" by registered mail or bringing it to the office between the above-mentioned period. Applicants must contact the CSE Office (c-sougou@cse.hokudai.ac.jp) to request the application form well before the application deadline.

Notes:

The results of the preliminary review of application qualifications will be mailed out in early December 2025. Those who are deemed eligible to apply for the program must apply online (https://e-apply.jp/e/hokudai-cse), pay the examination fee as per section 4 "Application Method" and

then mail required documents to the CSE Office.

Those who have passed the preliminary review of qualifications must submit documents listed in section No.1 (admission application, resume, examination admission card, and examinee photo card) , No.6 (English score reporting form and the score sheet of an English-language proficiency examination) , No.7 (Envelope in which the examination admission card is to be mailed), and No.8 (Envelope to be used for the notification of examination results and other information).

Note that Japanese government (MEXT) scholarship students and China Scholarship Council (CSC) supported students (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the CSE office in advance.

4. Application Method

Our application process consists of three steps: (1) online application (https://e-apply.jp/e/hokudai-cse), (2) payment of the examination fee, (3) submission of application documents by mail. If you fail to complete any of these steps in the required timeframe, your application will not be processed and will be cancelled.

<<Online Application and Payment Period>>
December 9 (Tue.) 10:00 a.m. - December 22 (Mon.) 5:00 p.m., 2025 (Japan Standard Time)

<<Examination Fee>>

Applicants are required to pay the examination fee (30,000 yen) after registering online. Applicants must pay a service fee of 500 yen in addition to the examination fee.

Available payment methods include: credit card; China Pay; convenience store; bank or post office ATM. Please note that applicants cannot make a payment for the fee through teller. For further details on payment methods, see the application website.

Japanese government (MEXT) scholarship students and China Scholarship Council (CSC) supported students (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the CSE office in advance.

The examination fee is non-refundable except for the following cases:

1. Applicants who paid the fee but cancelled their application (including cases where an application was rejected or application documents were not submitted by the deadline)
2. Applicants paid the fee more than once by mistake
3. Applicants who are exempt from the examination fee mistakenly paid the fee.

<<Document Submission Period>>
December 16 (Tue.) – December 22 (Mon.), 2025

After the payment of the examination fee, download the application form, resume, examination admission card, examinee photo card, English score report form and Research laboratory preference indication form as a PDF from the application website. Then, print single-sided and submit together with other application documents. Please note that these forms become available after you complete the payment of the examination fee.

When mailing the application documents, be sure to attach the mailing address label (appearing on the last page of the PDF) to the mailing envelope and send the documents by registered mail. The postmark deadline of submission is December 22 (Mon.). Please note that you cannot submit in-person at the CSE Office.

5. Application Documents

No.	Documents to Be Submitted	Application Qualifications					Notes
		(1)	(2) (8)	(3) (4) (5) (6) (7)	(9)	(10)	
1	Admission application, resume, examination admission card, and examinee photo card	○	○	○	○	○	Prescribed forms
2	A recommendation letter from your prospective supervisor		△	△	△	△	Unspecified format This is required only for international student applicants. Excluding those in Application Qualification (1).
3	Transcript from the applicant's (undergraduate) university or other school	○	○	○	○	○	Those who have graduated (or expect to graduate) from a college of technology should submit transcripts of general and advanced courses.
4	Certificate of graduation (or expected graduation) or completion (or expected completion) * This is not required of graduates (or prospective graduates) or currently enrolled students of School of Science or School of Engineering, of Hokkaido University.	○	○	○		○	(a) Those who have graduated (or expect to graduate) from a college of technology should submit a certificate of diploma conferment issued by the National Institution for Academic Degree and University Evaluation or a certificate of expected application for diploma conferment issued by the president of the college of technology. (b) Those who graduated or will graduate from a university in People's Republic of China (excluding Hong Kong and Macau) must submit the following documents. Graduates: a. Online Verification Report of Higher Education Qualification Certificate（教育部学历证书电子注册备案表） b. Graduation Diploma（毕业证书）and Degree Diploma（学位证书） Expected Graduates: a. Online Verification Report of Student Record（教育部学籍在线验证报告） * Obtain documents "a" above by requesting it at "中国高等教育学历证书查询": https://www.chsi.com.cn/xlcx/bgys.jsp. Also, be sure that there are 15 or more days left until the expiration date of the online verification at the time of its submission.1
5	Certificate of enrollment				○		
6	English score reporting form and the score sheet of an English-language proficiency examination (TOEFL test or TOEIC test)	○	○	○	○	○	Pursuant to section 7, "Submission of English Scores," applicants must submit the English score reporting form (prescribed form) and the score sheet of an English-language proficiency examination (TOEFL test or TOEIC test) taken in or after April 2023.

No.	Documents to Be Submitted	Application Qualifications					Notes
		(1)	(2) (8)	(3) (4) (5) (6) (7)	(9)	(10)	
7	Envelope in which the examination admission card is to be mailed	○	○	○	○	○	Not required if applicants are not in Japan ・Prepare an envelope (120mm x 235mm). ・Download the “Label for admission ticket” from our website and print it in color. ・Please write your postal code, address and name. Also,please seal 410 yen stamp on the envelope.
8	Envelope to be used for the notification of examination results and other information	○	○	○	○	○	Not required if applicants are not in Japan ・Prepare an envelope (240mm x 332mm). ・Download the “Label for results notification” from our website and print it in color. ・Please fill out your postal code, address and name. No need to attach stamps.
9	Research laboratory preference indication form	○	○	○	○	○	Prescribed form Select and indicate the order of your laboratory preferences (top five) from the “List of Instructors and Their Fields of Research.”
10	A recommendation letter from your academic advisor at the last university attended, etc.		△	△	○	△	Unspecified format *Applicants with application qualification (9) and International students applicants are required. Excluding those in Application Qualification (1). * This is not required for those who are currently enrolled, such as research students, who wish to study under the guidance of the same academic advisor after enrolling in the master’s degree program.
11	Envelope in which preliminary review results are to be mailed to the applicant			△	○	○	Required only for Applicants of Preliminary Review of Application Qualifications (Not required if applicants are not in Japan.) ・Prepare a self-addressed envelope (120mm x 235mm). ・Please seal 110 yen stamp on the envelope.
12	A copy of your Residence card	△	△	△	△	△	This is required only for international student applicants. Those who live outside of Japan should submit a copy of their passport.
13	Certificate of completion or withdrawal from a graduate school, and a graduate school transcript	△	△	△	△	△	This is required only for international student applicants who have been enrolled in a graduate school program at some point in the past.
14	Letter of approval for taking the entrance examination	△	△	△	△	△	Unspecified format This is required only for currently employed public officials who are expecting to remain employed while attending. The letter must be issued by someone who has authority over human resource matters at their place of employment.
15	A document verifying that the applicant possesses the equivalent or greater academic skill as that of a university graduate					○	Unspecified format Example: Documents explaining the applicant’s international activities, practical experience, history of learning languages, etc.; research papers; patent reports; documents indicating the acquisition of various certificates; and recommendation letters from relevant professors

Note: ○ indicates that the document is required;

△ indicates that the document only needs to be submitted by specified individuals.

6. Where to Apply

Administration Office, Graduate School of Chemical Sciences and Engineering, Hokkaido University (CSE Office)
Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628 Japan
Tel :(+81)-11-706-7247

7. Submission of English Scores

Submit your English score reporting form (prescribed form) at the time of application. Also, submit your English score sheets as follows.

Either of the English-language proficiency examination score sheets listed in (a) or (b) below, **from examinations taken in or after April 2023.** In the case of (c), please consult with the CSE Office in advance.

(a) TOEFL test official score sheet

Submit a Test Taker Score Report sent to the examinee by the U.S. Educational Testing Service (ETS). A printout of test results posted online shall be considered invalid.

On the Score Report Preferences screen shown during the process of applying to take the TOEFL iBT test, be sure to select “Web-accessible Score Report and a printed copy mailed to you” to ensure that a Test Taker Score Report is mailed to you.

(b) TOEIC test score sheet

Submit the Official Score Certificate or printed Digital Official Score Certificate.

(c) Those who have graduated from a university where English is the primary language of instruction may omit their score sheet by submitting a medium of instruction certificate from their degree granting university. For more details, please contact the Administration Office.

Important Notes

(a) If you submit more than one score sheet, the best score submitted shall be used. Individuals who have already submitted scores at the time of application may submit new scores between January 26 (Mon.) 9:00 a.m. (JST) and January 29 (Thu.) 5:00 p.m. (JST), 2026, by registered mail or bringing it to the office.
(b) Scores for TOEFL ITP, TOEIC IP, TOEIC Bridge, etc. are invalid.
(c) English score sheet will be returned after the exam date.

8. Selection Method

Admission decisions will be made comprehensively based on the examination results (written and oral), the score of TOEFL test/TOEIC test, academic transcript, etc.

9. Examination Schedule, Etc.

February 19 (Thu.), 2026

Note:

The oral examination schedule, examination venue, and other details will be provided when the examination admission card is sent out.

Exam Date	Time	Examination Subject	Examination Venue
Feb. 19 (Thu.)	10:00 to 11:30 a.m.	Specialized subject (Comprehensive Basic Chemistry)	To be specified when the examination admission card is sent out
	1:00 p.m.	Oral examination	

* If you have studied in a special program approved by the Graduate School of Chemical Sciences and Engineering, you may be exempt from taking the written examination.

10. Announcement of the result

The examination admission numbers of those who passed the examination will be posted in the entrance hall of the School of Engineering and our homepage (https://www.cse.hokudai.ac.jp) at 4:30 p.m. (tentatively) on **March 3 (Tue.), 2026**. In addition, all examinees will be notified of their results individually (results will not be provided over the phone).

11. Enrollment Procedures and Expenses

Details regarding enrollment procedures are provided in the notifications mailed to those who have been accepted.

Enrollment fee (expected): ¥282,000

First semester tuition for academic year 2026 (expected): ¥267,900

(total annual amount (expected): ¥535,800)

Notes:

1. If any revision is made while the student is enrolled, the new amount will be applied from the time of the revision.
2. If the enrollment fee is not paid during the admission procedure period, the applicant will be treated as having no intent to enroll.
3. If tuition is not paid for one semester, the student will be expelled, and his/her record of enrollment will be deleted. If you are having problems paying tuition due to financial hardship, you may be eligible for a tuition exemption or deferral.

12. Important Notes

(1) Be sure to bring your examination admission card with you on the day of the entrance examination and place it on your desk.

(2) Incomplete applications may not be accepted. Be sure that there are no errors in your application.

(3) If the name on your certificate of graduation or other documents is different from your current name, for example, your surname has changed, attach a certificate of family registry or other official document that verifies the change.

(4) If any falsified information is found in the application documents, the applicant's admission may be revoked.

(5) Submitted documents are not returnable to the applicants for any reason.

(6) Our graduate school generally does not allow dual enrollment.

13. Long-Term Study Program

Our graduate school has a long-term study system. Those wishing to take advantage of this system should carefully read and follow the application instructions in the section entitled “Information on the Long-Term Study Program” on page 18.

14. Others

(1) Examination admission cards will be sent out in **early February 2026** to those whose applications have been accepted.

(2) Applicants with physical or other disabilities who may need special accommodations to take examinations and attend classes should notify the CSE office of their condition by December 22 (Mon.), 2025.

15. Notes to foreign applicants

(1) About your visa and residential status

Studying at Hokkaido University as an international student requires you to obtain a ‘Student’ visa. Please note in advance that the ‘Certificate of Eligibility (COE)’ needed for a ‘Student’ visa application may take more than 3 months to be issued after its application. Please refer to our university website, too.

Japanese:https://intl-student-handbook.oia.hokudai.ac.jp/preparation/visa

English:https://intl-student-handbook.oia.hokudai.ac.jp/en/preparation-en/visa-en

（2） About Security Export Control

Hokkaido University conducts strict screenings on exporting goods and providing skills (including incoming international students) by establishing ‘Hokkaido University Security Export Control Regulations (北海道大学安全保障輸出管理規程)’ based on ‘Foreign Exchange and Foreign Trade Act (外国為替及び外国貿易法)’.

In case you are subject to our regulations, you may be restricted from learning or researching your desired fields of education.

For further details of regulations regarding Security Export Control, please refer to the Ministry of Economy, Trade and Industry website below.

Ministry of Economy, Trade and Industry (METI) website: https://www.meti.go.jp/policy/anpo/

II. International Student Admission

1. Admission Quotas

Division	No. of Admission Quota	Graduate School Web Site
Chemical Sciences and Engineering	Several	www.cse.hokudai.ac.jp

2. Application Qualifications

Individuals who are recognized as possessing the skills and capabilities required based on a recommendation from a specialized professor (hereinafter referred to as “the prospective supervisor”) in our graduate school whom the applicant would like to have as his/her research advisor after enrollment and individuals who fulfill one of the following application qualifications:

(1) Individuals who have completed or are expected to complete 16 years of school education in a foreign country by March 2026

(2) Individuals who have completed or are expected to complete 16 years of school education of a foreign country by taking a correspondence course in Japan offered by a school of that foreign country by March 2026

(3) Individuals who have completed a coursework of a foreign university at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course or who are expected to complete such coursework by March 2026 (The completion of the coursework needs to be considered equivalent to the completion of 16 years of school education in that foreign country. In addition, the educational institution is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology.)

(4) Individuals who have received, or are expected to receive by March 31, 2026, a degree equivalent to a bachelor’s degree from a university or a school in a foreign country (which has been evaluated by an authority certified by the government of the country concerned or an authority concerned in regard to the overall performance of its education and research activities, or which has been separately designated by the Minister of Education, Sports, Science and Technology as an educational establishment equivalent to the above) upon completion of a program or a course of study requiring 3 or more years (including completion of a correspondence course of a foreign institute taken in Japan, and completion of a course of study designated in the preceding item at a foreign educational establishment within the public education system of the country concerned).

(5) Individuals who, by March 2026, have attended a university for three years or more or individuals who, as of March 2026, meet one of the following:

- Those who have completed 15 years of school education in a foreign country
- Those who have completed 15 years of school education of a foreign country by taking a correspondence course in Japan offered by a school of that foreign country
- Those who have completed a coursework of a foreign country at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course (The completion of the coursework needs to be considered equivalent to the completion of 15 years of school education in that foreign country. In addition, the educational institution is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology.)

Furthermore, all individuals who apply to this qualification need to be deemed by this graduate school to have achieved excellent grades in the subjects prescribed by Hokkaido University

(6) Applicants who are recognized by the graduate school as possessing the equivalent or greater academic skill as that of a university graduate based on an individualized admission qualification

investigation and who will be 22 years of age as of March 31, 2026

Notes:

1. **Applicants must contact their prospective supervisor in advance.**
2. **If you have any questions regarding the application qualifications, contact the Administration Office of the Graduate School of Chemical Sciences and Engineering (hereafter referred to as "CSE office").**

3. Preliminary Review of Application Qualifications (Application Period, Etc.)

Novenber 17 (Mon.) 9:00 a.m. – November 20 (Thu.) 5:00 p.m., 2025 (Japan Standard Time)

We will conduct a preliminary review of application qualifications before the admission examination if applicants fall under either (5) or (6).

Individuals who fit one of the categories must submit Application Form of Preliminary Review of Qualifications and Resume (prescribed forms) and documents indicated in section 5, "Application Documents," with the exception of item No. 1 (Admission application, resume, examination admission card, and examinee photo card), No.5 (English score reporting form and the score sheet of an English-language proficiency examination), No.7 (Envelope in which the examination admission card is to be mailed), and No.8 (Envelope to be used for the notification of examination results and other information) to the address specified in section "6. Where to Apply" by registered mail or bringing it to the office between the above-mentioned period. Applicants must contact the CSE Office (c-sougou@cse.hokudai.ac.jp) to request the application form well before the application deadline.

Notes:

The results of the preliminary review of application qualifications will be mailed out in early December 2025. Those who are deemed eligible to apply for the program must apply online (https://e-apply.jp/e/hokudai-cse), pay the examination fee as per section 4 "Application Method" and then mail required documents to the CSE Office.

Those who have passed the preliminary review of qualifications must submit documents listed in section No.1 (admission application, resume, examination admission card, and examinee photo card), No.5 (English score reporting form and the score sheet of an English-language proficiency examination) , No.7 (Envelope in which the examination admission card is to be mailed), and No.8 (Envelope to be used for the notification of examination results and other information).

Note that Japanese government (MEXT) scholarship students and China Scholarship Council (CSC) supported student (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the CSE office in advance.

4. Application Method

Our application process consists of three steps: (1) online application (https://e-apply.jp/e/hokudai-cse), (2) payment of the examination fee, (3) submission of application documents by mail. If you fail to complete any of these steps in the required timeframe, your application will not be processed and will be cancelled.

<<Online Application and Payment Period>>

December 9 (Tue.) 10:00 a.m. - December 22 (Mon.) 5:00 p.m., 2025 (Japan Standard Time)

<<Examination Fee>>

Applicants are required to pay the examination fee (30,000 yen) after registering online. Applicants must pay a service fee of 500 yen in addition to the examination fee.

Available payment methods include: credit card; China Pay; convenience store; bank or post office ATM. Please note that applicants cannot make a payment for the fee through teller. For further details on payment methods, see the application website.

Japanese government (MEXT) scholarship students and China Scholarship Council (CSC) supported students (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the CSE office in advance.

The examination fee is non-refundable except for the following cases:

1. Applicants who paid the fee but cancelled their application (including cases where an application was rejected or application documents were not submitted by the deadline)
2. Applicants paid the fee more than twice by mistake
3. Applicants who are exempt from the examination fee mistakenly paid the fee.

<<Document Submission Period>>

December 16 (Tue.) - December 22 (Mon.), 2025

After the payment of the examination fee, download the application form, resume, examination admission card, examinee photo card and English score report form as a PDF from the application website. Then, print single-sided and submit together with other application documents. Please note that these forms become available after you complete the payment of the examination fee.

When mailing the application documents, be sure to attach the mailing address label (appearing on the last page of the PDF) to the mailing envelope and send the documents by registered mail. The postmark deadline of submission is December 22 (Mon.). Please note that you cannot submit in-person at the CSE Office.

5. Application Documents

No.	Documents to Be Submitted	Notes
1	Admission application, resume, examination admission card, and examinee photo card	Prescribed forms
2	A recommendation letter from your prospective supervisor	Unspecified format
3	A transcript from the applicant's (undergraduate) university	
4	A certificate of graduation (or expected graduation)	Those who graduated or will graduate from a university in People's Republic of China (excluding Hong Kong and Macau) must submit the following documents. Graduates: a. Online Verification Report of Higher Education Qualification Certificate（教育部学历证书电子注册备案表） b. Graduation Diploma（毕业证书）and Degree Diploma（学位证书） Expected Graduates: a. Online Verification Report of Student Record（教育部学籍在线验证报告） * Obtain documents "a" above by requesting it at "中国高等教育学历证书查询": https://www.chsi.com.cn/xlcx/bgys.jsp. Also, be sure that there are 15 or more days left until the expiration date of the online verification at the time of its submission.1
5	English score reporting form and the score sheet of an English-language proficiency examination (TOEFL test or TOEIC test)	Pursuant to section 7, "Submission of English Scores," applicants must submit the English score reporting form (prescribed form) and the score sheet of an English-language proficiency examination (TOEFL test or TOEIC test) taken in or after April 2023.
6	A recommendation letter from your academic advisor at the last university attended	This is not required for those who are currently enrolled, such as research students, who wish to study under the guidance of the same academic advisor after enrolling in the master's degree program.
7	Envelope in which the examination admission card is to be mailed	Not required if applicants are not in Japan ・Prepare an envelope (120mm x 235mm). ・Download the "Label for admission ticket" from our website and print it in color. ・Please write your postal code, address and name. Also, please seal 410 yen stamp on the envelope.
8	Envelope to be used for the notification of examination results and other information	Not required if applicants are not in Japan ・Prepare an envelope (240mm x 332mm). ・Download the "Label for results notification" from our website and print it in color. ・Please fill out your postal code, address and name. No need to attach stamps.
9	Envelope in which preliminary review results are to be mailed to the applicant	Required only for Applicants of Preliminary Review of Application Qualifications (Not required if applicants are not in Japan.) ・Prepare a self-addressed envelope (120mm x 235mm). ・Please seal 110 yen stamp on the envelope.
10	Certificate of completion or withdrawal from a graduate school, and a graduate school transcript	This is required only if you had enrolled in a graduate school program in the past.
11	A copy of your residence card or passport.	A copy of your residence card (for residences in Japan) or your passport (for residences in foreign countries)
12	Other required documents from the accepting professor	

6. Where to Apply

Administration Office, Graduate School of Chemical Sciences and Engineering, Hokkaido University (CSE Office)

Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628 Japan　　Tel: 011-706-7247

7. Submission of English Scores

Submit your English score reporting form (prescribed form) at the time of application. Also, submit your English score sheets as follows.

Either of the English-language proficiency examination score sheets listed in (a) or (b) below, **from examinations taken in or after April 2023.** In the case of (c), please consult with the CSE Office in advance.

(a) TOEFL test official score sheet

Submit a Test Taker Score Report sent to the examinee by the U.S. Educational Testing Service (ETS). A printout of test results posted online shall be considered invalid.

On the Score Report Preferences screen shown during the process of applying to take the TOEFL iBT test, be sure to select "Web-accessible Score Report and a printed copy mailed to you" to ensure that a Test Taker Score Report is mailed to you.

(b) TOEIC test score sheet

Submit the Official Score Certificate or printed Digital Official Score Certificate.

(c) Those who have graduated from a university where English is the primary language of instruction may omit their score sheet by submitting a medium of instruction certificate from their degree granting university. For more details, please contact the Administration Office.

Important Notes

(a) If you submit more than one score sheet, the best score submitted shall be used. Individuals who have already submitted scores at the time of application may submit new scores between January 26 (Mon.) 9:00 a.m. (JST) and January 29 (Thu.) 5:00 p.m. (JST), 2026, by registered mail or bringing it to the office.

(b) Scores for TOEFL ITP, TOEIC IP, TOEIC Bridge, etc. are invalid.

(c) English score sheet will be returned after the exam date.

8. Selection Method

Admission decisions will be made based on a comprehensive review of the applicant's knowledge of the subject matter, foreign language skills, etc.

9. Examination Schedule, Etc.

February 19 (Thu.), 2026

Note:

The oral examination schedule, examination venue, and other details will be provided when the examination admission card is sent out.

Examination Date	Time	Examination Subject	Examination Venue
February. 19 (Thu.)	9:00 a.m. or 1:00 p.m.	Oral Examination	To be specified when the examination admission card is sent out

10. Announcements of the Result

The examination admission numbers of those who passed the examination will be posted in the entrance hall of the School of Engineering and our homepage (https://www.cse.hokudai.ac.jp) at 4:30 p.m. (tentatively) on **March 3 (Tue.), 2026**. In addition, all examinees will be notified of their results individually (results will not be provided over the phone).

11. Enrollment Procedures and Expenses

Details regarding enrollment procedures are provided in the notifications mailed to those who have been accepted.

Enrollment fee (expected): ¥282,000

First semester tuition for academic year 2026 (expected): ¥267,900

(total annual amount (expected): ¥535,800)

Notes:

1. If any revision is made while the student is enrolled, the new amount will be applied from the time of the revision.
2. If the enrollment fee is not paid during the admission procedure period, the applicant will be treated as having no intent to enroll.
3. If tuition is not paid for one semester, the student will be expelled, and his/her record of enrollment will be deleted. If you are having problems paying tuition due to financial hardship, you may be eligible for a tuition exemption or deferral.

12. Important Notes

(1) Be sure to bring your examination admission card with you on the day of the entrance examination and place it on your desk.

(2) Incomplete applications may not be accepted. Be sure that there are no errors in your application.

(3) If any falsified information is found in the application documents, the applicant's admission may be revoked.

(4) Submitted documents are not returnable to the applicants for any reason.

(5) Our graduate school generally does not allow dual enrollment.

13. Long-Term Study Program

Our graduate school has a long-term study system. Those wishing to take advantage of this system should carefully read and follow the application instructions in the section entitled "Information on the Long-Term Study Program" on page 18.

14. Others

(1) Examination admission cards will be sent out in **early February 2026** to those whose applications have been accepted.

(2) Applicants with physical or other disabilities who may need special accommodations to take examinations and attend classes should notify the CSE office of their condition by December 22 (Mon.), 2025.

15. Notes to foreign applicants

(1) About your visa and residential status

Studying at Hokkaido University as an international student requires you to obtain a 'Student' visa. Please note in advance that the 'Certificate of Eligibility (COE)' needed for a 'Student' visa application may take more than 3 months to be issued after its application. Please refer to our

university website, too.

Japanese:https://intl-student-handbook.oia.hokudai.ac.jp/preparation/visa

English:https://intl-student-handbook.oia.hokudai.ac.jp/en/preparation-en/visa-en

（2） About Security Export Control

Hokkaido University conducts strict screenings on exporting goods and providing skills (including incoming international students) by establishing ‘Hokkaido University Security Export Control Regulations (北海道大学安全保障輸出管理規程)’ based on ‘Foreign Exchange and Foreign Trade Act (外国為替及び外国貿易法)’.

In case you are subject to our regulations, you may be restricted from learning or researching your desired fields of education.

For further details of regulations regarding Security Export Control, please refer to the Ministry of Economy, Trade and Industry website below.

Ministry of Economy, Trade and Industry (METI) website: https://www.meti.go.jp/policy/anpo/

Information on the Long-Term Study Program

1. Overview

This system is available to students who would not be able to complete the program within the standard course term (two years) due to full-time employment or other circumstances (including responsibilities related to the care of elderly or disabled family members or the raising of children) and therefore want a longer period of time to conduct their studies systematically. Students must file an application and may be approved for a systematically planned course of study (hereinafter referred to as “long-term study”) after an individual review.

2. Eligibility

Individuals who are applying for the long-term study program must meet one of the terms listed below, be unable to make a commitment to full-time studies as a consequence of the circumstances described, and would therefore like to extend in advance the number of years over which they will conduct their studies (research).

(1) Individuals who are engaged in full-time employment, such as those currently employed by government agencies or companies (excluding those who will continue to receive salaries while being relieved of their work duties), and self-employed individuals

(2) Individuals who are engaged in temporary or part-time employment that is deemed by this graduate school to adversely affect their studies

(3) Individuals who have responsibilities, such as raising children or caring for other family members, that are deemed by this graduate school to adversely affect their studies to the same degree as the responsibilities listed in item (2) above

(4) Individuals who have visual impairments, hearing impairments, physical disabilities, or other disabilities and are deemed by the graduate school to be adversely affected by their disabilities, causing their graduate school studies to suffer for a long term.

3. Enrollment Period

The allowable length of period under the long-term study program is up to four years for the master’s degree program. Study periods for long-term study applicants are approved in one-year increments.

The maximum length of enrollment (including the period for time off, etc.) for a student who has been approved for long-term study is up to an additional two years beyond the approved long-term study period in the master’s degree program, the same maximum length of time as students under the standard term of study.

The period of time off that this graduate school will allow is the same for students under either the standard term of study or long-term study program, i.e., two years for master’s students.

4. Application Procedures

(1) Application Deadline

In general, those wishing to apply for the long-term study program should apply at the time they submit their admission applications.

(2) Submission of Documents

Submit the following documents to CSE Office

(a) An application for long-term study (form 1)

(b) A long-term study plan (form 2)

(c) Documents verifying your reasons for needing long-term study approval

(3) Review and Notification of Results

Applications for the long-term study program will be reviewed by the graduate school, and applicants will be notified of the results of that review with the notification of examination results.

5. Contraction or Extension of the Long-Term Study Period

If deemed necessary by the graduate school, approval may be granted for a contraction or extension of the long-term study period once, and only once, during the student's period of enrollment. However, the long-term study period can only be contracted from four years to three years (one year beyond the standard two-year course term).

6. Tuition

The tuition of students who have been approved for the long-term study program shall be calculated in annual amounts by dividing the total tuition for the standard term of study (annual tuition × 2 years) by the number of years for which the long-term study has been approved. In cases where the tuition amount is revised or a change to the long-term study period is approved, tuition will be recalculated at that time. However, any tuition already paid will not be adjusted retroactively.

※Be sure not to pay the tuition for your current term of study until you are notified of whether your application for the long-term study program or a change thereof has been approved.

7. Other

To request an application form or clarify any issues, contact CSE Office

Handling of Personal Information

(1) All personal information collected by Hokkaido University will be completely protected in compliance with the Act on the Protection of Personal Information Held by Independent Administrative Agencies, etc., and other related acts and pursuant to the Hokkaido University Personal Information Management Regulations.
(2) Names, addresses, and other personal information provided to the university through application procedures will be used solely for (a) enrollee selection, (b) the announcement of exam results, (c) admission procedures, (d) surveys and research on enrollee selection methods, and (e) related processes.
(3) Some of these processes may be outsourced by the university to a contracted service provider (hereinafter referred to as "contractor"). All or some of the personal information provided by applicants may be provided to the contractor only as needed to perform the tasks for which it has been contracted.
(4) Personal information obtained through application procedures will be used only for those who are admitted for (a) school administration purposes (student registration, academic counseling, etc.), (b) student support services (health management, scholarship applications, etc.), and (c) tuition and other administrative purposes.
(5) Of the personal information described in item (4) above, only names and addresses will be used to facilitate communication with students from the Hokkaido University Frontier Foundation and organizations related to Hokkaido University, such as (a) the Hokkaido University Athletic Union, and (b) the Hokkaido University School of Engineering and School of Science Alumni Association.

Graduate School of Chemical Sciences and Engineering, Hokkaido University

List of Instructors and Their Fields of Research

Molecular Chemistry and Engineering Course

No.	Laboratory	Staff		Research Contents	Faculty
Microscopic Chemical Analyses Unit					
01	Quantum Chemistry	Professor	TAKETSUGU Tetsuya	Development of "Predictive" Chemical Theory for Reaction, Electron, and Spectroscopy and programs, as well as advanced computational chemistry applications. First-principle excited-state reaction dynamics, theory-guiding catalytic design with element strategy, development of a large-scale electronic structure theory, near-field molecular theory, reaction informatics.	Faculty of Science
		Associate Professor	KOBAYASHI Masato		
		Assistant Professor	IWASA Takeshi		
02	Theoretical Chemistry	Professor	MAEDA Satoshi	Development of new theories and computational programs aimed at predicting reaction pathways in molecules and materials, and their applications. The main targets of the applications are organic reaction, photoreaction, enzyme reaction, catalysis, and crystal phase transition.	Faculty of Science
03	Physical Chemistry	Professor	MURAKOSHI Kei	Surface electrochemistry: ultra-sensitive detection and characterization of surfaces of target materials under electrochemical potential control for novel energy conversion systems and intelligent devices. Electrochemical synthesis of nano-materials with well-defined electronic/geometrical structurers for novel catalysis.	Faculty of Science
		Lecturer	FUKUSHIMA Tomohiro		
		Assistant Professor	ITATANI Masaki		
		Assistant Professor	ZHOU Ruifeng		
04	Analytical Chemistry	Professor	UENO Kosei	Light-matter interaction. Ultrafast dynamics and photochemistry/optical physics of nanomaterials in microscopic regions using ultrashort pulse lasers. Chemical and biosensors using nanostructures.	Faculty of Science
		Associate Professor	RYUZAKI Sou		
		Assistant Professor	IMAEDA Keisuke		
Fine Chemical Reactions Unit					
05	Organic Reaction	Professor	INOKUMA Yasuhide	Structural organic chemistry on synthesis and structural analysis of unique functional molecules such as polyketones. Use of machine learning in organic chemistry. Synthetic organic chemistry, electroorganic synthesis, organofluorine chemistry.	Faculty of Engineering
		Associate Professor	SENBOKU Hisanori		
06	Organoelement Chemistry	Professor	ITO Hajime	The research purpose of our laboratory is development of novel synthetic reactions, valuable catalytic process and new functional materials in the field of organoelement chemistry. We aim to challenge to establish a new chemistry frontier that includes organometallics, heteroatom chemistry and coordination chemistry.	Faculty of Engineering
		Associate Professor	ISHIYAMA Tatsuo		
		Associate Professor	KUBOTA Koji		
07	Organic Synthesis	Professor	OHKUMA Takeshi	Molecular catalysis, catalytic asymmetric reactions, practical organic synthesis.	Faculty of Engineering
		Associate Professor	ARAI Noriyoshi		
		Assistant Professor	YURINO Taiga		
08	Organometallic Chemistry	Professor	SAWAMURA Masaya	Catalyst design using supramolecules, solid surfaces, and light for the development of transformative chemical reactions. Quantum chemical calculations for exploring chemical reaction mechanisms and catalyst design.	Faculty of Science
		Associate Professor	SHIMIZU Yohei		
		Assistant Professor	MASUDA Yusuke		
09	Organic Chemistry I	Professor	SUZUKI Takanori	Structural and physical organic chemistry on novel heat- and light-responsive redox systems and strained molecules.	Faculty of Science
		Associate Professor	ISHIGAKI Yusuke		
10	Chemical Reaction Development	Professor	Benjamin LIST	Design and discovery of chemical reactions using computational, informational, and experimental science. Development of novel reactions using organocatalysts. Development of materials and functional organic molecules. Prediction of chemical reactions based on chemical informatics. Development of automated reaction pathway search methods and electronic state dynamics simulation methods.	ICReDD
		Professor	IWATA Satoru		
		Professor	MITA Tsuyoshi		
		Associate Professor	Pavel SIDOROV		
		Associate Professor	JIN Mingoo		
		Associate Professor	GAO Min		
		Associate Professor	JIANG Julong		
		Assistant Professor	AKAMA Tomoko		
Catalytic Reactions Unit					
11	Catalytic Transformation	Professor	MURAYAMA Toru	Renewable energy utilization and environmental protection applications based on the precise design of solid catalysts. Reactions at room temperature using gold nanoparticle catalysts, development of catalysts for energy-saving removal of pollutants from the atmospheric environment, and development of catalysts that promote the effective use of CO_2.	Institute for Catalysis
		Associate Professor	ODA Akira		
		Assistant Professor	ISHIKAWA Hiroya		
12	Macromolecular Science	Professor	NAKANO Tamaki	Design and synthesis of chiral polymers and supramolecular systems having innovative functions such as pharmaceutical activities, light emission, electronic and ionic conduction, separation, and catalytic activities focusing on helical polymers, π-stacked polymers, liquid crystals, and biopolymers.	Institute for Catalysis
		Associate Professor	SONG Zhiyi		
13	Catalyst Material	Professor	SHIMIZU Kenichi	Development of metal nanocluster catalyst for direct synthesis of chemicals. Development of supported metal catalysts for automobile emission control. Surface chemistry and surface spectroscopy for catalyst design.	Institute for Catalysis
		Associate Professor	TOYAO Takashi		
		Assistant Professor	Abhijit SHROTRI		
		Assistant Professor	ANZAI Akihiko		
14	Catalysis Theory	Professor	HASEGAWA Jun-ya	Theoretical and computational chemistry for catalysis. Analysis of potential energy surface and dynamics of catalytic reactions. Development of chemical concepts, theoretical and AI models, and first-principle molecular simulation method for catalytic reactions. Development and application of large-scale computational methods for catalytic reactions using electric power.	Institute for Catalysis
		Associate Professor	IIDA Kenji		
		Assistant Professor	MIYAZAKI Ray		
Chemical Process Engineering Unit					
15	Chemical System Engineering	Professor	KIKUCHI Ryuji	Energy carrier direct power generation fuel cells. Green hydrogen production catalysts and devices. Electrochemical synthesis of ammonia. Electrochemical conversion of methane and ethane to valuable chemicals. Valuable chemicals synthesis by CO_2 hydrogenation.	Faculty of Engineering
		Associate Professor	TADA Shohei		
16	Material Design and Engineering	Professor	MUKAI Shin	Material design and engineering, adsorption engineering, separation engineering, precise structural controlling of porous materials, development of new production systems of nanomaterials, development of devices for reaction, separation and energy storage using nanomaterials, material recycling.	Faculty of Engineering
		Associate Professor	NAKASAKA Yuta		
		Assistant Professor	IWASA Nobuhiro		
		Assistant Professor	NAGAISHI Shintaro		
17	Catalytic Reaction Engineering	Associate Professor	OGINO Isao	Reaction engineering, design and tuning of structures and reactive microenvironments of catalysts and separation materials for sustainable chemical processes, microwave-assisted synthesis of solid catalysts and electrode materials.	Faculty of Engineering
18	Chemical Energy Conversion Systems	Associate Professor	TSUBOUCHI Naoto	Clean carbon technology for efficient reduction of CO_2 emissions: fundamental research about advanced and novel technologies for biomass, low rank coals, heavy oil residues and low-valued natural gas.	Faculty of Engineering

※Laboratory No.38 are not recruiting students.
※Laboratory No.27, No.28, No.34~No.37, No.47 are not recruiting Master's Degree Program students.

Materials Chemistry and Engineering Course

No.	Laboratory	Staff		Research Contents	Faculty
Molecular Materials Chemistry Unit					
19	Chemical Informatics	Professor	TAKAHASHI Keisuke	Materials discovery through materials informatics. The aim of the research is to develop fully automated materials and catalysts using a combination of high-throughput experiments and calculations, with the integration of artificial intelligence.	Faculty of Science
		Assistant Professor	Lauren TAKAHASHI		
20	Molecule & Life Nonlinear Science	Professor	KOMATSUZAKI Tamiki	Practical-oriented theoretical chemistry. The fundamental principles of chance and necessity of chemical reactions, and new concepts and methodologies to bridge theory and experiments for biological molecular systems.	Research Institute for Electronic Science
		Assistant Professor	NISHIMURA Goro		
		Assistant Professor	LI Jizhou		
21	Coordination Chemistry	Associate Professor	KOBAYASHI Atsushi	Creation of next-generation multifunctional devices based on the integration of organic and inorganic materials. The target is developments of artificial photosynthesis, photoelectric conversion, and photocatalytic systems and novel phenomena through multi-scale integration of organic molecules, metal complexes, polymers, semiconductor nanocrystals, metal thin films and etc.	Faculty of Science
22	Solid-State Chemistry	Associate Professor	HARADA Jun	Studies of structures, molecular motions, and phase transitions of molecular crystals: Development and functional control of molecular ferroelectric crystals.	Faculty of Science
Inorganic Materials Chemistry Unit					
23	Inorganic Chemistry	Professor	MATSUI Masaki	Solid-state ionic materials for next-generation battery applications. Low-temperature synthesis of complex metal oxdes. Crystal growth mechanisms in less noble metal electrodeposition.	Faculty of Science
		Associate Professor	KOBAYASHI Hiroaki		
		Assistant Professor	NASU Akira		
24	Structural Inorganic Chemistry	Professor	MIURA Akira	Preparation of emerging functional ceramics, microstructure control of ceramics and their property evaluation, new nitrides and chlorides for optical, electromagnetic and chemical application.	Faculty of Engineering
		Associate Professor	MASUBUCHI Yuji		
25	Inorganic Synthesis Chemistry	Professor	TADANAGA Kiyoharu	Development of functional inorganic materials using liquid phase. Preparation of nano-structured thin films and materials for energy conversion and storage by solution processes.	Faculty of Engineering
		Assistant Professor	FUJII Yuta		
26	Solid State Chemistry	Professor	SHIMADA Toshihiro	Synthesis and new functions of nano-structured solids and thin films including inorganic nanomaterials, organic semiconductors, spintronics devices and nanocarbons.	Faculty of Engineering
		Assistant Professor	YOKOKURA Seiya		
		Assistant Professor	WAIZUMI Hiroki		
27	Nano Ceramics	Guest Professor	KUWATA Naoaki	Synthesis and control of functional properties of novel solid-state battery materials and ion dynamics analysis.	National Institute for Materials Science
		Guest Associate Professor	KUBOTA Kei		
28	Applied Materials Chemistry	Guest Professor	KIJIMA Norihito	Synthesis, crystal structure, and functional properties of inorganic materials for energy storage. Precise synthesis of inorganic porous materials and their potential applications as adsorbents and catalysts	National Institute of Advanced Industrial Science and Technology
		Guest Professor	KIMURA Tatsuo		
Frontier Materials Chemistry Unit					
29	Energy Materials Chemistry	Professor	AOKI Yoshitaka	Design of proton/hydride ion conductive inorganic materials and related all-solid-state energy conversion devices, and theoretical design of electronic materials by quantum theory and computational chemistry.	Faculty of Engineering
		Associate Professor	TACHIKAWA Hiroto		
		Assistant Professor	JEONG Seongwoo		
30	Interfacial Electrochemistry	Professor	HABAZAKI Hiroki	Electrochemical fabrication of nanostructure-controlled materials and thin films and their mechanistic understanding and functional applications, nano- and micro-electrochemical characterizations of advanced and practical materials, and electrochemical energy conversion and storage devices.	Faculty of Engineering
		Associate Professor	FUSHIMI Koji		
		Assistant Professor	IWAI Mana		
		Assistant Professor	KITANO Sho		
31	Advanced Materials Chemistry	Professor	HASEGAWA Yasuchika	Development of strong-luminescent and photofunctional advanced materials based on photochemistry and coordination chemistry.	Faculty of Engineering
		Associate Professor	KITAGAWA Yuichi		
		Assistant Professor	WANG Mengfei		
32	Material Chemistry	Professor	SADA Kazuki	Creation of innovative functions, structures, and reactions by controlling intermolecular forces in mixtures. Discovery and understanding of novel physical phenomena and development of novel functional materials through collaboration between experimental chemistry, computational chemistry, and materials informatics.	Faculty of Science
		Assistant Professor	MATSUOKA Keitaro		
		Assistant Professor	TSUTSUMI Takuro		
33	Interactive Functional Materials	Professor	NAGASHIMA Kazuki	Designed nanomaterials synthesis and nanostructure control based on inorganic chemistry and nanomaterial chemistry, exploration of nanoscale functional properties, creation of novel nano/microdevices, and application to large-area thin film devices and data science. Application examples include the artificial olfactory sensors and the optoelectronic devices.	Research Institute for Electronic Science
		Associate Professor	YOMOGIDA Yohei		
		Assistant Professor	OKA Sayuki		
Functional Materials Chemistry Unit					
34	Interfacial Energy Conversion Materials Chemistry	Guest Professor	NOGUCHI Hidenori	Fundamental study of chemical-electric energy conversion, including novel batteries, fuel cell catalysts. In situ determination of geometric, electronic, and molecular structures at solid/ liquid interfaces and electron transfer dynamics by ultrafast laser spectroscopy.	National Institute for Materials Science
35	Superconducting Materials	Guest Professor	YAMAURA Kazunari	Aiming to develop quantum functional materials, we synthesize novel inorganic compounds, perform atomic-level structural analysis, and evaluate their physical properties to explore new physical phenomena based on structure–property correlations. Our focus is primarily on transition metal oxides.	National Institute for Materials Science
		Guest Associate Professor	TSUJIMOTO Yoshihiro		
36	Nanoscience	Guest Professor	SHIRAHATA Naoto	Our focus is on researching and developing new optoelectronic and electronic-functional materials that will contribute to advancements in nanoscience and nanotechnology. Our research is rooted in physical and device science, with the aim of exploring new phenomena and applications. To achieve our goals, we utilize advanced material design and synthesis techniques, along with cutting-edge nanoscopic analysis.	National Institute for Materials Science
		Guest Professor	KITAURA Ryo		
37	Nano-Assembled Materials Chemistry	Guest Professor	YOSHIO Masafumi	Development of nanostructured functional materials that contribute to highly efficient energy conversion devices such as fuel cells, lithium ion batteries, and actuators, based on the understanding of interfacial physicochemical phenomena by in-situ observation techniques.	National Institute for Materials Science
		Guest Professor	MASUDA Takuya		

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※Laboratory No.27, No.28, No.34~No.37, No.47 are not recruiting Master's Degree Program students.

Biological Chemistry and Engineering Course					
No.	Laboratory	Staff		Research Contents	Faculty
Biomolecular Chemistry Unit					
38	Biological Chemistry	Professor	SAKAGUCHI Kazuyasu	Functional regulation of tumor suppressor-related proteins through post-translational modification and localization. Function and evolution of oligomeric structure in tumor suppressor protein p53. Regulation of differentiation, metabolism, and function in innate immune cells.Fundamental principles of life and their applications.	Faculty of Science
		Assistant Professor	NAKAGAWA Natsumi		
39	Biostructural Chemistry	Professor	ISHIMORI Koichiro	Functional and structural characterization and molecular design of proteins using spectroscopy. Exploring collective function of molecules derived from chemical reactions.	Faculty of Science
		Associate Professor	UCHIDA Takeshi		
		Assistant Professor	KAGEYAMA Yoshiyuki		
40	Molecular Biochemistry	Professor	ABE Kazuhiro	Structural and functional analysis to elucidate molecular mechanisms of membrane transport proteins including primary transporters, employing X-ray crystallography, cryo-EM SPA combined with various biochemical and biophysical analysis.	Faculty of Science
		Assistant Professor	Chai Chandru GOPALASINGAM		
41	Microsystem Chemistry	Professor	TOKESHI Manabu	Development of on-site analysis systems and functional nanoparticles using microfluidic devices and new measurement technologies.	Faculty of Engineering
		Associate Professor	MAEKI Masatoshi		
		Assistant Professor	ISHIDA Akihiko		
Biofunctional Chemistry Unit					
42	Mechanistic Organic Chemistry	Professor	NAGAKI Aiichiro	Flash organic chemistry led by flow microreactor research, flash creation of functional molecules.	Faculty of Science
		Associate Professor	OKAMOTO Kazuhiro		
		Assistant Professor	MIYAGISHI Hiromichi		
		Assistant Professor	ZHONG Xianzhu		
43	Organic Chemistry II	Professor	TANINO Keiji	Total synthesis of natural products having a complex structure and novel bioactivities. Development of efficient methodologies and new reactions to construct polycyclic skeleton with various functional groups on the basis of carbocation chemistry, heteroatom chemistry, and organometallic chemistry.	Faculty of Science
		Associate Professor	SUZUKI Takahiro		
		Assistant Professor	TAKINO Junya		
44	Chemistry of Molecular Assemblies	Associate Professor	SATO Shinichiro	Synthesis and computational chemistry of functional molecular assemblies based on soft matter such as synthetic polymers and carbohydrate chains.	Faculty of Engineering
		Associate Professor	YAMAMOTO Takuya		
45	Polymer Chemistry	Professor	SATOH Toshifumi	Synthetic and structure-property relationship studies of architecturally complex polymers; synthetic study and application of conductive polymers; synthetic study and application of functional block copolymers; development of environmentally benign polymer synthesis process; creation of environmentally benign polymers.	Faculty of Engineering
		Associate Professor	ISONO Takuya		
		Assistant Professor	LI Feng		
46	Biosynthetic Chemistry	Professor	MATSUMOTO Ken' ichiro	Biosynthesis of useful and unnatural chemicals using engineered biosynthetic systems, and in vitro evolution of enzymes to achieve the goal. The targets are biodegradable plastics, biocompatible polymers, chiral compounds, enzymatic degradation, recycle, lipid production and antibacterial lipid.	Faculty of Engineering
		Associate Professor	KIKUKAWA Hiroshi		
		Assistant Professor	HACHISUKA Shin-ichi		
47	Chemical Biotechnology	Guest Professor	HIRAISHI Tomohiro	Elucidation of reaction mechanism of bio-based polymer-degrading enzymes, and development of highly functional and efficient enzymes for biotechnological applications. Materais science for designing advanced functional bio-based polymers.	RIKEN
		Guest Professor	FUJITA Masahiro		
Cell Engineering Unit					
48	Applied Biochemistry	Professor	DAIRI Tohru	Search for and characterization of novel primary/secondary metabolic pathways in microorganisms and their application for production of useful compounds by biosynthetic and metabolic engineering.	Faculty of Engineering
		Associate Professor	OGASAWARA Yasushi		
		Assistant Professor	SATOH Yasuharu		
49	Biomolecular Chemistry	Associate Professor	TAJIMA Kenji	Biopolymer Chemistry(Elucidation of cellulose synthetic mechanism in bacteria, Creation of eco-recycling polymer materials with high mechanical strength, and Mass production of nanocellulose by bacteria and its application), Cell processing engineering (process development with stem cells), Animal cell cultivation engineering for pharmaceuticals production, Bioanalytical chemistry (development of novel biochemical analysis systems using microdevices and molecular assemblies as reaction media).	Faculty of Engineering
		Associate Professor	TANI Hirofumi		
Molecular Medical Biochemistry Unit					
50	Signaling in Cancer and Immunology	Professor	TAKAOKA Akinori	Research on molecular mechanisms underlying cellular response to infection and cancer. ((i) Pathogen recognition receptors (innate sensors) and their signaling pathways, (ii) Innate immune response against cancer)	Institute for Genetic Medicine
		Associate Professor	SATO Seiichi		
		Assistant Professor	SUZUKI Hiraku		
51	Developmental Physiology	Professor	MOTEGI Fumio	Cell and developmental mechanisms underlying cell polarity, soma-germ fate dichotomy, asymmetric cell division, and morphogenesis. Development of new optical techniques for in vivo molecular imaging.	Institute for Genetic Medicine
		Lecturer	KIMURA Kenji		
		Lecturer	NISHIMURA Yukako		

※Laboratory No.38 are not recruiting students.
※Laboratory No.27, No.28, No.34~No.37, No.47 are not recruiting Master's Degree Program students.