

April 2020 and October 2020

Enrollment

**Graduate School of Chemical Sciences and Engineering,
Hokkaido University**

**Ph.D Program
(Doctoral Course)**

Application Guidelines

— Admission for Special Program —

**Advanced Graduate School of Chemistry and
Materials Science (AGS)**

September 2019

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

It remains vivid in most people's memory that Dr. Akira Suzuki, Professor Emeritus of Hokkaido University, attracted attention by honorably receiving the Nobel Prize in Chemistry in autumn 2010. In the same year, 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. (admission quotas in master's course: 129; admission quotas in doctoral course: 38). This is the first great attempt to combine chemistry both in Science and Engineering in National Universities in Japan, and it is a very unique graduate school in its specialization in chemistry.

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, the Faculty of Engineering, the Research Institute for Electronic Science, the Institute for Genetic Medicine, and the Institute for Catalysis work closely together on research and education activities. Researchers affiliated with the National Institute for Materials Science, the National Institute of Advanced Industrial Science and Technology, the RIKEN, and the National Cerebral and Cardiovascular Center also 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, such as those on basic specialized subjects of graduate school education in science and engineering fields. 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.

Educational Goals

By providing a systematic education that integrates research findings in 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.

What is the AGS

Chemistry is playing a major role in innovations of materials science addressing both academic and social issues that traverse and encompass the main fields of science and technology. To achieve the innovations that are demanded by the 21st century society in future materials, energy, medicine, welfare and so on, education of talented top-class young students in chemistry is highly significant. In the international educational program named the "Advanced Graduate School of Chemistry and Materials Science (AGS)" of the Graduate School of Chemical Sciences and Engineering, Hokkaido University, we are recruiting talented elite students from all over the world and will foster them independent researchers, providing enough financial supports to selected students and fulfilling professional education in chemistry under the atmosphere of friendly competition. Selected students will be fully supported by the scholarship that covers the examination fee, entrance fee, tuition fees, and living costs. The "AGS" program includes all major fields in chemistry and materials science, including recent advances in organic chemistry, physical chemistry, inorganic chemistry, organometallic chemistry, polymer chemistry, catalysis, materials chemistry, biochemistry and

chemical engineering.

This integrated program is expected to provide people who will lead the next generation in scientific and technological innovations addressing both academic and social issues in chemistry and materials science. Let's open the door to challenge unknown world of chemistry at the campus of Hokkaido University having the best environment in Japan.

Admission Policy

The Graduate School of Chemical Sciences and Engineering accepts talented applicants who want to learn about the specialized fields of science and engineering and earn their doctoral degree in the field of integrated chemistry. The graduate school also actively accepts international students. Admission periods are in April and October. The doctoral course entrance examination consists of a document screening and an oral examination to evaluate the applicant's specialized knowledge and research skills. Also, in order to demonstrate the required knowledge and skills of English language, applicants are required to provide a certificate of English qualification. We do expect a lot of applications from motivated students.

1. Admission Calendar

Application Period	September 2, 2019 – October 31, 2019
First Screening <Document Screening>	November 1, 2019 – November 20, 2019
Announcement of the result of First Screening <document screening>	November 21, 2019
Second Screening <Oral Examination (Interview)>	December 2, 2019 – December 20, 2019
Announcement of the Final Result	February 3, 2020
Time of Enrollment	April 1, 2020 or October 1, 2020

2. Admission Quotas

Division	No. of Admission Quotas
Chemical Sciences and Engineering	Several

3. Application Period

September 2, 2019 – October 31, 2019

4. Application Documents

No.	Documents to Be Submitted	Notes
1	Admission application	Prescribed forms
2	Two recommendation letters	Prescribed forms One letter should be from your academic advisor at the last school you attended This is not required for those who are currently enrolled in Hokkaido University, and wish to study under the guidance of the same academic supervisor after enrolling in the doctoral course.
3	Summary of your master's thesis or an abstract of your research achievements	(a) Those who have been awarded any master's degree should provide a summary of their master's thesis or other materials equivalent to a master's thesis (unspecified format, approximately two A4-sized pages). (b) Those expecting to be awarded a master's degree should provide an abstract of the research conducted over the course of their master's program (up to 500 words) or other equivalent materials.
4	List of publications and copies of key research papers (if any)	The titles or subjects of books or papers, with the author's name and date of publication should be written on the list.
5	An academic transcript from both undergraduate and graduate schools	
6	Official certificates of degrees (Both Bachelor's Degree and Master's Degree.)	The certificates must show the dates the degrees were awarded. If applicants are still doing their Master's Courses upon application, they need to prepare certificates of prospective graduation for their Master's courses.
7	A certificate for English qualification	A Copy of English-language proficiency examination score sheets (TOEFL, TOEIC, IELTS etc.)

8	A copy of your passport	
9	Any documents stipulated by accepting professor	

※All documents should be written in English or Japanese Language

5. Where to Apply

AGS Office at the Frontier Chemistry Center

Graduate School of Chemical Sciences and Engineering, Hokkaido University

Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628, JAPAN

Tel/Fax: (+81)-11-706-8110

E-mail: ags@eng.hokudai.ac.jp

Note:

If your application is submitted by postal mail, **be sure to use registered mail.**

6. Examination Fee

¥30,000

The following applicants will be exempted from the examination fee.

1. Students supported by the Japanese Government (MEXT)
2. Students supported by the China Scholarship Council (CSC)
3. International Students supported by the Hokkaido University Special Grant Program
4. Recipients of the Hokkaido University President's Fellowship

For those who are required to pay the examination fee will be announced how to pay for it later.

7. Selection Method and Examination Schedule

7-1 First Screening <Document screening>

First Screening will be made comprehensively based on application documents such as academic transcripts, research achievement, etc.

The result of the first screening will be sent by email directly to the applicants on November 21, 2019.

7-2 Second Screening <Oral Examination (Interview)>

: December 2, 2019 – December 20, 2019

In Oral Examination, applicants are required to give a presentation of their past researches and their research proposal. It includes a discussion with the interviewers in English.

Interviews will be held via a video conferencing system or a video chat system (such as “Polycom”, “Skype” and so on).

The oral examination schedule and other details will be provided to those who pass the first screening.

8. Notification of the Final Result

: February 3, 2020

All examinees of the second screening (Oral Examination) will be notified of the results individually.

9. Tuition Fees and Enrollment Fee

Enrollment fee: ¥282,000

Tuition Fee ¥535,800 per year <Fee is subject to change>

The following students will be exempted from all the fees

1. Students supported by the Japanese Government (MEXT)
2. Students supported by the China Scholarship Council (CSC)
3. International Students supported by the Hokkaido University Special Grant Program
4. Recipients of the Hokkaido University President's Fellowship

Note that the period of tuition fee exemption is basically three years; the standard period of Ph.D. study.

10. Admission Requirements

Individuals (1) have strong academic records for both undergraduate and graduate studies, (2) have been awarded or expect to be awarded a Master's degree from a university in a foreign country or in Japan by March, 2020 (by September 2020 for October 2020 enrollment), or expect to be evaluated by us as possessing equivalent academic skill *1.

*1 : for details, see the section entitled "Application Prerequisites"

Note

- 1) Please find an appropriate professor you wish to have as your academic supervisor and get informal agreement before submitting the application form. The list of our academic staff is available at <http://www.cse.hokudai.ac.jp/english/org/>.
- 2) If you have any questions regarding the Application Requirements, contact the AGS Office.

11. Notes

- (1) Incomplete applications may not be accepted. Be sure that there are no errors in your application documents.
- (2) If any falsified information is found in the application documents, the applicant's admission may be revoked.
- (3) The AGS students should actively join the following programs as long as the participation does not bring any negative effects on your research work.
 1. CSE summer school
 2. Symposium, Workshop or other events sponsored by the CSE
After completion of the course, the AGS alumni are highly expected to contribute to the expansion of the AGS network.
- (4) Financial Support Information

Please note that only selected applicants will receive the following supports. Those who would like to know details need to consult the AGS office before contacting our professors.

1. HU Special Grant Program
2. The MEXT scholarship by the University Recommendation
3. The MEXT scholarship by the Embassy Recommendation
4. Hokkaido University President's Fellowship

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

AGS Office at the Frontier Chemistry Center
Graduate School of Chemical Sciences and Engineering, Hokkaido University
Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628, JAPAN
Tel/Fax: (+81)-11-706-8110
E-mail: ags@eng.hokudai.ac.jp

Application Prerequisites (for April Enrollee)

For October Enrollee: the same as April Enrollee except that March 31, 2020 should read September 30, 2020.

- (1) Individuals who have been awarded a master's degree or professional degree from a Japanese university (the term "professional degree" used hereinafter shall refer to the professional degree prescribed in Article 5-2 of the Degree Regulations [Ordinance of the Ministry of Education, Science and Culture No. 9 of 1953] pursuant to stipulations in Article 104, Clause 1, of the School Education Act); this includes those who expect to be awarded such a degree by March 31, 2020.
- (2) Individuals who have been awarded or expect to be awarded a degree equivalent to a master's degree or professional degree from a foreign university by March 31, 2020 (hereinafter referred to as "individuals from a foreign educational system")
- (3) Individuals who have been awarded or expect to be awarded a degree equivalent to a master's degree or professional degree by March 31, 2020 by taking a correspondence course in Japan offered by a foreign school (hereinafter referred to as "individuals from a foreign educational system via correspondence course")
- (4) Individuals who have completed a graduate school coursework of a foreign university at an educational institution in Japan and have been awarded a degree equivalent to a master's degree or professional degree. The institution needs to be positioned within the school education system of that foreign country as an educational body with a graduate school course and is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology. This includes those who expect to be awarded such a degree by March 31, 2020 (hereinafter referred to as "individuals who have completed coursework in a school designated as equivalent to a graduate school").
- (5) Individuals who have been awarded or expected to be awarded a degree equivalent to a master's degree by March 31, 2020 from the United Nations University as prescribed in Article 1(2) of the Act on Special Measures Incidental of Enforcement of the Agreement between the United Nations and Japan regarding the Headquarters of the United Nations University (Act No.72 of 1976), which was established under the December 11, 1972 resolution of the General Assembly of the United Nations (hereinafter referred to as "individuals from the UN University").
- (6) Individuals who have completed their formal education by taking a correspondence course through a non-Japanese university, an educational institution which received the designation by (4), or the United Nations University, who have passed an examination or a screening equivalent to the regulations by Article 16.2 in Standards for the Establishment of Graduate Schools, and who are recognized to have an academic ability equivalent to Master's degree holders by the Graduate School, or who will obtain it by March 31, 2020.
- (7) Individuals designated by the Minister of Education, Culture, Sports, Science, and Technology (1989 Notice No. 118, Ministry of Education, Science and Culture).
 - (a) Those who have graduated from a university; have conducted research for two years or longer at a university, research institution, etc.; and are recognized by this graduate school as possessing equivalent or greater academic capabilities as those of a person who has a master's degree based on its research achievements, etc.
 - (b) Those who have completed 16 years of school education in a foreign country or 16 years of school education of a foreign country by taking a correspondence course in Japan offered by a school of

that foreign country; have conducted research for two years or longer at a university, research institution, etc.; and are recognized by this graduate school as possessing equivalent or greater academic capabilities as those of a person who has a master's degree based on its research achievements, etc.

- (8) Applicants who are recognized by the graduate school as possessing the equivalent or greater academic skill as that of a person who has a master's degree or professional degree based on an individualized admission qualification investigation and who will be 24 years of age as of March 31, 2020 (hereinafter referred to as "individuals who apply through an individualized admission qualification investigation")

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