






Once you enter the program, a special curriculum is provided over the course of five years during the master's and doctoral periods. We introduce events held in the first year.

Note: Please understand that the schedule may change without notice.

Postgraduate school events	Event schedule for the first year of the program (2015)
APR	Entrance ceremony
MAY	Early in the month: briefing session for registration
JUN	Mid-month: application deadline
JUL	Late in the month: selective examination
AUG	<b>■ Orientation / BBQ</b>  After the orientation ceremony, enjoy a BBQ with professors and graduate student upper classmates.
SEP	<b>■ Seminars at Companies</b>  With the cooperation of domestic companies, we offer opportunities for discussions with company researchers and human resources personnel, presentations of study results, and visits to laboratories and factories.
OCT	<b>■ Frontier Mathematical Sciences I</b>  Classes are held in collaboration with the Department of Mathematics. The classes aim to foster perspectives on mathematical sciences that are necessary to advance your research.
NOV	<b>■ Interdisciplinary Lab Visits</b> The students in the program are transferred to labs in different fields for 2-week to 2-month periods to learn new professional knowledge and skills. 
DEC	
JAN	
FEB	<b>■ Language Training</b> Presentation of graduation thesis and master's thesis  The program gives the opportunity for about two weeks of foreign language study.
MAR	

Become an ambitious leader who advances the frontiers of chemical science.

## HOKKAIDO UNIVERSITY AMBITIOUS LEADER'S PROGRAM

Fostering Future Leaders to  
Open New Frontiers in Materials Science

Prof. Koichiro ISHIMORI, Coordinator of Ambitious Leader's Program, answers your questions about this leading program.

**Q1** What is "HOKKAIDO UNIVERSITY AMBITIOUS LEADER'S PROGRAM (ALP) Fostering Future Leaders to Open New Frontiers in Materials Science" ?

ALP is a cross-disciplinary graduate education program for a consistent five years curriculum.

This program covers specialised education in Material Science and the study of Mathematical Science. Moreover, the participating students can take part in **various activities** provided by ALP.

We'd like to know what we can do in this program!

They can take up a courses offered by collaborative organization in our campus, and they can expand opportunities for **extra-curricular activities outside the campus**.

For example, they can develop a interact with students in a leading program established in other universities, do internships at a company, and join an international summer camp.

on-campus and off-campus to the world!

Prof. Koichiro ISHIMORI, Faculty of Science, Program for Leading Graduate Schools Committee Coordinator, Materials Science Leading Program

**Q2** Who can apply for the program? When is it?

Graduate School of Chemical Sciences and Engineering  
Graduate School of Life Science  
Graduate School of Environmental Science (Material Science)  
Graduate School of Science (Mathematics)  
Graduate School of Engineering (Quantum Science)

ALP is open for the first-grade doctoral students in these courses. \*

For me?

Me too!

May in the first-semester of the doctoral course ALP will hold an orientation meeting for applicants

July Apply for admission

August Examination for the 20 seats (/year)

September Successful applicant will start the program

\*It also is open for a few second-grade doctoral students

**Q3** What would be required at the selective examination?

Faculties will review all applicants based on their application and results of the oral examination.

What's this applicant like...?

His/Her academic achievement, research outcome, reasons for applying, and vision for the future also be evaluated.

**Q4** Are there any financial aid for the ALP students?

We get financial incentive every month ...great!

ALP delivers **financial incentive** for all ALP students. They could focus on their study with no worry about finance.

(October in the first grade - March in the fifth grade of doctoral course)

language support

Overseas academic activities

Furthermore, once an application is approved, ALP students obtain **research supports** such as: research funding, academic writing support, financial aid for overseas academic activities.

In case of taking Foreign language training and going internship, ALP delivers travel expences, visiting fees, school fees, and various supports in need.

**Q5** Does ALP provide any supports for post-Doctoral career?

ALP is an educational program which for the students with a strong determination to achieve a major goal beyond the academic fields!

From Hokkaido University... to the world!

We foster students with creativity, a higher perspective, and great network, who will become a leader for the next-generation.

ALP also provides support for employment in government, industry, and academia for post-Doctoral career.

Well, I think I'll go up for ALP!

I'll check the website right now...

Other events (financial support available)

**■ Brush-Up English Course**  
TOEIC study course, a science English course, a business English course and other courses are offered.

**■ Overseas Internship**  
Students are eligible to participate in a 1- to 2-month program at related overseas universities or research institutions.

**■ Internship at Companies**  
Students are able to take part in a research internship program at Japanese companies.

**■ Company Consortium**  
The "company consortium" aims to foster skills in identifying and solving problems.

■Details are at  
<http://ambitious-lp.sci.hokudai.ac.jp/en/>

ALP Hokkaido University Search



Hokkaido University Program for Leading Graduate Schools  
Ambitious Leader's Program Fostering Future Leaders to Open New  
Frontiers in Materials Science



We asked all six upper classmates about what motivated them to enter the reading program, what they thought of the classes they attended and what their daily schedules were.

Why not follow in the footsteps of able upper classmates who are globally active in chemical science?

※Each grade of interviewees is as of February 2016.



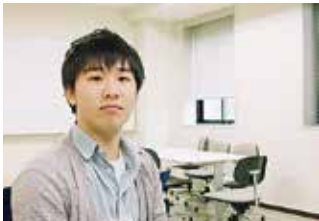
Mr. Akio Nitta

Program Pilot Students (D1)  
Graduate School of Environmental Science  
Environmental catalytic chemistry

**Q1: What are the benefits of the program?**  
A1: Various curriculums are provided. I especially enjoyed the 2-week visit to New Zealand in the language program, where I learned English immersively at a homestay.

**Q2: What did you think about the Special Career Management Seminar\*?**  
A2: I had lively discussions with classmates about unusual topics, which left me with new perspectives. It was the kind of experience I never would’ve had had if I’d only been doing researching at a lab. I’m confident this experience will be useful after I start to work for a company.

\*The concept behind the seminar is active learning and problem-based learning on a specific theme, and the purpose of the seminar is to enhance one’s abilities in perspective-taking, creativity, leadership and communication. The seminar consists of about five students with different specializations.



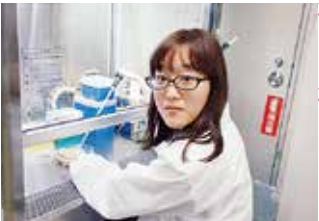
Mr. Satoshi Handa

1st-term Students (M2)  
Graduate School of Science  
Applied mathematics

**Q1: What motivated you to enter the program?**  
A1: If you go on to the doctoral course in mathematics, your future may be limited largely to academia. But if you’re hoping to end up at a company, this program offers not only mathematics education, but also an opportunity to learn other fields and to improve other skills. Also, Making connections with companies is attractive for my future plans.

**Q2: What are the benefits of the program?**  
A2: I was able to make connections with people from various fields. Actually, during the “Visits to Laboratories of Diverse Fields”\*, I gained valuable experience in different fields, such as making gels by hand at the polymer chemistry lab.

\*The “Interdisciplinary Lab Visits” is a part of a program to provide a broader range of knowledge and ways of thinking. It lasts about 2 weeks to 2 months.



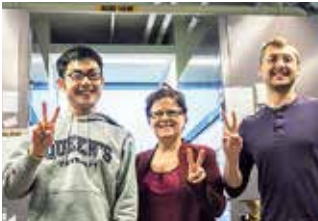
Ms. Tayeon Nam

2nd-term Students (M1)  
Graduate School of Chemical Science and Engineering  
Enzyme biology

**Q1: What motivated you to enter the program?**  
A1: I was inspired by three upper classmates in our lab who were active in this program. Also, I was interested in “Language Training” and “Interdisciplinary Lab Visits”, so I decided to take part in this program.

**Q2: How was Frontier Mathematical Sciences\*?**  
A2: The last time I’d taken a math class was when I was an undergrad student, so I had to prepare before class. The professor explained how math is useful in real life, so the class was very interesting. I learned more than just formulas.

\*The aim of Frontier Mathematical Sciences I, II and III is to have students acquire basic knowledge of math that is necessary to understand cross-disciplinary fields of math and science and to gain abstract thinking and holistic techniques.

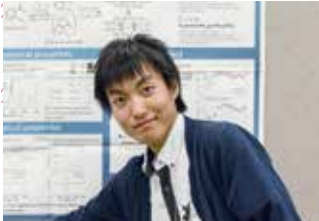


Mr. Ryoto Kojima

Program Pilot Students (D1)  
Graduate School of Chemical Science and Engineering  
Organic metal chemistry

**Q1: What are the benefits of the program?**  
A1: I make good connections with students from different fields. My many colleagues on campus are encouraging. The program offers us the opportunity to explain our studies to those from different fields and to give presentations. Those experiences have given me the chance to see different points of view, and it’s a good training for job searches.

**Q2: How was the overseas internship?**  
A2: Although boron chemistry wasn’t my research theme, I still took it at Queen’s University in Ontario, Canada, from August to October 2016. My practical English improved, and I was able to get good research results. I really saw myself grow in those three months. Organic chemistry is a field in which you need to move around actively and to experiment with many cases in order to get results. To be able to work well with professors and students abroad, I needed to have better communication skills. I’m planning to present the results of the experiments at a conference of the Chemical Society of Japan in March 2016. Thanks to this internship program, I’ve started to think about working overseas. Ten years from now, you might find me working there.

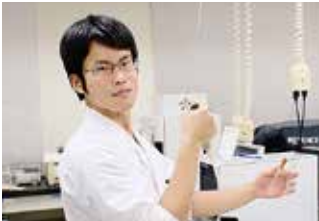


Mr. Satoshi Wada

1st-term Students (M2)  
Graduate School of Chemical Science and Engineering  
Photochemistry and Coordination chemistry

**Q1: What motivated you to join the program?**  
A1: When I was fourth-year undergraduate student, I’d been planning to work for a company after graduating from the master’s program. I was hoping to keep studying, but I wasn’t able to decide on whether to advance to the doctoral program. One day, I found a poster that read “Become a doctor who’ll play an active role in industry”. This poster motivated me to enter this program, because this course provides research opportunities, practical experience for leadership and a chance to study abroad, which had been a dream of mine. Additionally, this program offers a scholarship.

**Q2: What impressed you about your experience in the program?**  
A2: I organized an English workshop with 7 other students at the 3rd International Symposium in November 2015. We met four times before the symposium, and we brainstormed and developed plans. I was in charge of managing the groups, and I made presentation. It was very different from anything I’d experienced before, and I was able to proudly say “I did it!” I’m expecting that experience to be useful, and I’ll continue studying.



Mr. Kenta Mine

2nd-term Students (M1)  
Graduate School of Chemical Science and Engineering  
Biochemistry

**Q1: What motivated you to enter the program?**  
A1: This program offers interdisciplinary studies, such as on the basics of materials science, math and biological science. There are plenty of workshops where you can polish your leadership skills.

**Q2: What are the benefits?**  
A2: The support system is reliable, so we can comfortably gain a broad but deep range of experience. Also, the ability to meet students of other labs and to expand my networks is a huge benefit.

**Q3: What were your impressions of “Seminars at Companies”?**  
A3: I came to realize what’s expected of doctors through discussions with some managers from companies. I’d like to be a doctor who can communicate smoothly, identify and solve problems, and make something different.

**Q4: Where do you see yourself in ten years?**  
A4: After graduating from the doctoral course, I imagine I’ll be working hard as a leader. Not only will I step up my efforts in my work, but I’ll also make bold steps in new directions.

### Interview with a professor

Interviewers asked Professor Naoto Koshizaki (Division of Quantum Science and Engineering, Faculty of Engineering) about what makes this program appealing. Professor Koshizaki is an academic supervisor of Mr. Shota Sakaki.



Naoto Koshizaki

Professor  
Division of Quantum Science and Engineering,  
Faculty of Engineering

### A program designed to expand the student’s horizons

Mr. Sakaki utilized the curriculum system of the Ambitious Leader’s Program very well. As a result, he established a wide range of connections by participating in activities with others from different fields and businesses. Also, the “Interdisciplinary Lab Visits” and “Frontier Mathematical Sciences” helped him enhance his comprehensive perspective. His cheerful, active personality suits the program. He’s now working on a thesis based on discussions with teachers in math and on mathematical models and analyses.

### Opportunities to meet others to make connections

I advise students to collaborate with other researchers. The Ambitious Leader’s Program offers many chances to meet people working in industry and academia. Financial support for travel and research is available. Therefore, this program offers the best environment for students who are willing to go out of the university and expand their networks. This program is worth considering as a stepping stone toward a doctoral program.

Interviewers:  
Miura and Kori

