

Tohoku University COLABS review WS24/25

Preparation

The application process is quite straightforward. One fills in the online application form and submits the necessary information. Afterwards, there is a brief interview, where one should know some basic information of the Heidelberg University, since as an exchange student, one is representing the home institute.

Upon acceptance into the COLABS program, one needs to find a laboratory to join. More details are provided in the next section. Afterwards, the next crucial step is the visa application. In a first step, one needs to apply for the Certificate of Eligibility (CoE), which is necessary in the subsequent visa application. Since both CoE and application take quite a long time, I would recommend doing that as soon as possible.

The COLABS program

The COLABS program is a research-oriented exchange program in which participants join a research group and work on a specific research topic. Therefore, before coming to Japan, one needs to find a fitting research group to join. The majority of the research groups have their web pages with information, but they can be difficult to find. One can try to search in Japanese and use Google translate on the websites to obtain the information. In some cases, these websites are outdated, so one can also check the recent publications of the group to grasp a better understanding of their current research focus. Before coming to Japan, you can already inquire about some possible topics and their details, or if you wish, request to participate in the weekly laboratory meetings to get to know the people and their work style.

During the research period, participants usually have a tutor and a supervisor. The tutor is typically a fellow master student who can answer various questions about the lab or general life. They are usually able to speak both Japanese and English, so you can also ask them about administrative and organizational matters that you need to handle. The supervisor, usually a postdoc or professor, is responsible for overseeing the research project. One generally has a high degree of freedom in their work and no fixed working hours, which I initially did not expect. Additionally, there is always the opportunity to attend conferences in their research field or participate in specialized workshops.

Since the majority of lab members are usually Japanese, they prefer to speak in Japanese. Therefore, for easier integration, it is advisable to learn Japanese in advance or take the language courses offered by the language school, such as C105, which is an introductory course. However, even with just the introductory course, one can learn a surprising amount and hold basic conversations, which is very helpful since Japanese people tend to prefer

communicating in Japanese.

Furthermore, the lab usually hosts various parties, such as welcome/farewell parties, Imoni parties, and Bonenkai parties, which provide a great opportunity to integrate into the laboratory and experience more local food and to talk to all the lab mates. These events are typically held in a relaxed and casual manner, and I highly recommend attending them.

All the information for the stay can be found on the Tohoku University website. The "Getting Started," "Current Students," and "Leaving Procedure" sections contain all the essential information. Furthermore, there is also an international help desk where you can get any assistance, university and living in Japan related, for your stay.

Living in Sendai

Sendai is one of the largest cities in Japan and is located north of Tokyo. You can reach Sendai by bus (6 hours), Shinkansen (3 hours), or by plane from Tokyo, though I would not recommend flying. Once in Sendai, you need to transfer to a local bus or subway to reach the dormitory. Alternatively, you can take a taxi, which, surprisingly, is significantly cheaper compared to Germany.

As an exchange student, you are required to live in a dormitory. There are three different dormitories spread throughout the city, so I recommend choosing the one closest to your laboratory building to minimize daily commuting time. The dorms accommodate 4 to 6 people, with an effort to have a mix of Japanese and foreign exchange students. This setup is great for meeting new people, making friends, and learning more about daily life in Japan.

One of the best aspects of Sendai is that it is a major trade city, allowing you to enjoy food and sake from all prefectures. Additionally, eating out in restaurants is quite affordable in Japan, making it a great way to experience Japanese cuisine. There are some dishes I personally would not eat, but it is up to everyone.

For travel, there are plenty of options, from one-day weekend trips to nearby places such as Matsushima and Yamagata to longer trips via the local airport, which provides easy access to Kyushu and Hokkaido. One thing to keep in mind is that, depending on your destination, flying can sometimes be cheaper than taking the Shinkansen.

TL;dr

The COLABS program provides a great opportunity to conduct research in a new environment while also exploring Japan. As a physics student, it was the perfect chance for me to be

directly involved in the experiment, as it was located in Japan. Additionally, it also allowed meeting people whom one previously only met through zoom calls.

While one might think it's scary to go alone to a new country halfway across the world and feel lonely at times, many international students join during the same period. Additionally, everyone—from people in the lab to those in clubs and dormitories—is very friendly and welcoming, making it easy to connect with others. Hence, it is a once-in-a-lifetime experience, so enjoy it as much as possible.