



Special Feature !! Three Students Visited Saskatchewan University in Canada!!

Starting in 2013, Saskatchewan University in Canada has been hosting Iwate University students in a short-term overseas research internship. This year, three students spent three weeks from October 2 to November 10 to experience a local research environment. They will share how they felt through the various useful experiences they had including the advancement in their research work and the improvement of their English in the science field.

★ Momoko Chiba, Materials Science and Engineering, M1

Research about morphological evaluation of hollow Fe_3O_4 nanoparticles at Prof. Szipunar lab. of Department of Mechanical Engineering !

Just three weeks of living overseas has completely changed my motivation toward research work and my view of other countries. Everything was new to me from research work to working with lab mates, living with the host family, and Canadian culture. While I felt lost or had to struggle sometimes, the overall experience was pure fun. My lab mates took me on a campus tour when they had time and told me about the food court that sold sushi. My host family treated me like a member of the family from the moment they met me at the airport. The biggest difference I noticed during these three weeks of experience as a researcher was the daily schedule. In Canada, lab work starts in the morning. Many researchers get to go home by 5:00 pm and enjoyed the evening. In contrast, researchers in Japan engage in their research work until midnight. I liked how they enjoyed their lives in Canada and I also like the dedication of Japanese researchers and how they try to improve each other.



With her host family



With the members of Prof. Szipunar's Lab.

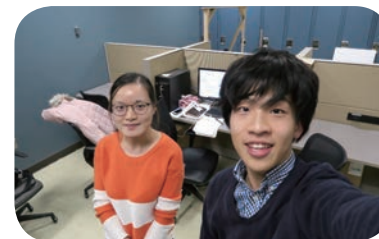
★ Hiromasa Yamazaki, Electrical, Electronic, and Communication Engineering, M1

Research about feedback control with neural networks at Prof. Gupta and Bui lab. of Department of Electrical & Computer Engineering !

I never lived abroad before this internship at Saskatchewan University. My English was the worst among the three students from Iwate University, so it was really difficult to communicate with non-Japanese people all in English. I tried to carry an electronic dictionary and smartphone to look up words immediately when anything was unclear so that I could find a key for advancing my research work and achieve something, which was after all the biggest focus of my internship. Also, I tried repeatedly to communicate my ideas with words and gestures when I talked to the locals and gradually increased communications by making myself understood and conveying my feelings. I think it was a great improvement for me. This internship was a great opportunity for me to have a broader perspective beyond the research domain and think about different aspects of life.



Communicating with enrolled Japanese students



With a foreign student who was so supportive

★ Yuya Shoji, Electrical, Electronic, and Communication Engineering, M1

Research about real time measurements with analog-digital converter at Prof. Whid lab. of Department of Electrical & Computer Engineering !

I applied to this three-week internship at Saskatchewan University as I thought it would be a rare opportunity for me to stay in an English-speaking country no matter how short that was. From the moment I arrived in Canada, I was overwhelmed by how fast the locals talked and I felt like I was ignorant of the world! In other words, I was able to realize how small the world I was in before is. So, in that sense, this experience meant a lot to me. It was an eventful three weeks. Among others, the farewell party on the last day of internship made the strongest impression on me. Not only Japanese and Canadians, but also students from China, India, and Ecuador gathered. It was a great opportunity for me to talk to them in English and feel an international atmosphere first hand.

I hope more students get to have an opportunity like this. It was actually my first time abroad. I thought I knew about internationalization but the actual experience left a strong impression. I hope more people will have a chance to experience this.



Sightseeing with Sebastian who is from Ecuador and was home staying same time



Farewell Party

Special Feature !!

Ten Iwate University Students Visited Hanbat National University in Korea

2018. 10. 29 ~ 11. 3

As part of a student exchange program, ten graduate and undergraduate students visited Hanbat National University in Korea for a week from October 29 to November 3, 2018. The program was a sequel to the program at Iwate University in August 2018 and designed to encourage deeper exchange through mutual visits (the program in August 2018 was featured in the newsletter vol.17). This time, students engaged in a joint PBL (joint Problem Based Learning), field trip to local businesses, and cultural site tours.

★ Day 1 and 2: PBL and Final Presentation

The themes of the joint PBL are 1) Applied technology of artificial intelligence, 2) Systems for creating, storing, and saving energy for the future, 3) Power generation, 4) Reduction of oceanic pollution, and 5) Controlling algae for improving water quality. Students were divided into mixed groups of four or five Japanese and Korean students based on themes and have repeated discussions on SNS to find out solutions from a science and engineering perspective for the last two months after the program in August. The morning of Day 1 included an interim debrief session in which each team gave a ten-minute presentation. Students engaged in the joint PBL in the afternoon following the mini-lectures by four instructors from Iwate University and Hanbat National University. Students reviewed and redesigned the solutions based on the advice they received from instructors from both universities during the interim debrief session.

On Day 2, students made their materials for the final presentation scheduled in the evening. The presentation was 25 minutes long and had to be given in English. All teams presented unique ideas including the technology to apply AI to the selection of every day outfits and a method of controlling the growth of algae with ultrasound to prevent water quality deterioration. As a result of voting by the instructors, the team that presented the idea of effective air cooling and power generation using a water circulation system in a building won the first prize (see the photo on the left). After the final presentation, there was a dinner party at a barbecue restaurant in Daejeon. Students seemed relieved after the presentation and enjoyed each other's company in a relaxed mood.

★ Day 3: Cultural Site Tours

Students visited the History Hall in Hanbat National University and took a tour around labs in the morning of Day 3. The History Hall exhibits the steps that the university took from its predecessor, founded in 1927, to the current Hanbat National University along with the history of Korea and of the Korea-Japan relationship. In the afternoon, they went to Buyeo, which is an hour west of Daejeon by bus. Buyeo is an ancient city of Baekje and has numerous historical sites. Students visited Jeongnimsaji Temple and National Museum to learn and feel the culture and history of Korea.



Working for PBL (picture left). The discussion was taken place smooth since the students did it once in last August in Iwate Univ.



The awarded team for the best PBL and Prof. Lee (picture left), Ms. Hyewoon Kim, Ms. Sohyun Lee, Mr. Takumi Watari and Mr. Hideto Nobuta from the left.



Drinking together after the last presentation (picture left). Looks like they were having so much fun.



The exhibition hall of history at Hanbat Univ. (picture right). Prof. Lee eagerly explained to us.



Korea Baekje Cultural Complex in Buyeo (picture left). It is a huge historical theme park and was built in 2010. TV crew was shooting TV drama there.

★ Day 4 and 5: Visit to KIMM, Internship at Labs!

Daejeon, where Hanbat National University is located, is known as a hub of leading-edge companies and research institutions. Students visited the Korea Institute of Machinery (KIMM) in the morning of Day 4 and learned about state-of-the-art machine processing technologies and future energy technologies. The KIMM boasts the first commercial maglev in Korea (second in the world) in its premise and students got to ride it. The maglev was loaded with a number of cutting-edge technologies including a window that turns opaque as soon as it enters a residential area. After the tour around KIMM they visited the Bank of Korea Museum and learned about the country's currency and the history of minting.

For a day and a half from the afternoon of Day 4 to the end of Day 5, Iwate University students had internships separately at the labs in their respective fields such as chemistry, machinery, electric and electronic engineering, and materials. Unlike their earlier program, they independently engaged in the lab work but they were able to collaborate with lab members with high spirits.

★ Day 6: To Seoul

In the morning of Day 6, which was the last day of the program, students moved to Seoul by bus with Hanbat students. After independent Seoul city tours in two groups, they visited the Joseon era Changdeok Palace together. As it was the season of fall colors, and the already picturesque garden and palace were even more beautiful with the colors and presented gorgeous and spectacular scenery. After the last Korean meal in Seoul, students departed for Japan after a lingering farewell.



In front of Porcelain Levitation Railway (picture right). You can see it in Incheon Airport, Seoul, too



At Prof. Lee's chemistry lab. (picture right). Our dean, Prof. Funazaki is on the left part of the picture.



Sacrelegia Palace in Seoul (picture right). The place was crowded with many tourists since it was a colored maple season.

Participant's Voice



Ms. Yumi Kawamura, Regional and Community Design (Civil and Environ. Eng.) M1: This time, I had a sense of further fulfillment since it was second time to meet those Korean students. Talking about the lab internship, it became a very meaningful time for me. The members were so generous to explain and exchange ideas and opinions. I'd like to take advantage of this experience to develop my research works.



Ms. Lee Sohyeon, Creative Convergence Engineering B3: Before this activities, I thought Japanese friend's country and my country were different. But I felt it was not different from what I felt in Korean peers. It wasn't awkward at all and it wasn't different from us at all. I was so sorry to break up with these friends. I think it was a great activity to get such good friends, to share thoughts with foreign friends and to interact with each other in culture.



Mr. Keita Hayasaka, Electrical Engineering and Computer Science B4: One thing I felt through this program was that there is not much difference in thoughts between us and Korean people. There were so much in common, like hobbies or experiences. It was so difficult to me communicating with them in English. But I noticed then, it is important to express myself to let them understand me. At first, one week seemed long to me, but it came out to be a really short time afterwards.



Mr. Jeon Junyoung, Civil & Environmental Engineering B4: Three months later, we met again. On the first day, we prepared a presentation for three months. The next day, we finally made the final announcement. I was nervous because the other teams did well, but we did our very best. Although we did not win the prize, we did well enough. I had an opportunity to make Japanese friends and talk about themes. It was a really good experience and memories.

★ Eight Iwate University Students Visited King Mongkut's University of Technology Thonburi and Ladkrabang in Thailand!

The Faculty of Science and Engineering sent eight undergraduate students to King Mongkut's University of Technology Thonburi and Ladkrabang in Thailand from August 24 to September 15, 2018. Two of them were also at Furukawa Fitel (a subsidiary of a Japanese company, Furukawa Electric) and another two were in Sumida Electric (a subsidiary of Sumida Corporation) and had valuable experiences. Interns, Yohei Sato and Takuto Kikuchi will share their stories.

★ Yohei Sato, Electrical, Electronic, and Communication Engineering, B4

I was in two completely different programs in Thailand. One was a training program at a university lab and the other was an internship program at a company's factory. I had a week-long short research internship at a science and engineering university called King Mongkut's Institute of Technology Ladkrabang (KMITL) in Bangkok where I experienced research projects in various fields that I had never had a chance to know. Although it was difficult to get a deeper understanding of each project as it was a short period, I was able to experience many fields that I didn't know about and gain a broader perspective through this program.

I also had a two-week training at a factory of Sumida Electric Thailand. First, I had to think about the concept of the activities that I wanted to engage in and made specific plans in various directions. The main theme of my work was the improvement of production efficiency and I had a chance to present my proposals in a video conference to a number of participants.

All of the communications were done in English during this internship. This was a great opportunity for me to gain an international way of thinking.



Laboratory at KMITL



Prof. Daibo, Mr. Yohei Sato, Ms. Shiho Ichikawa, from the left

★ Takuto Kikuchi, Electrical, Electronic, and Communication Engineering, B3

I was an intern under Dr. Orapin Kerdchoechuen at King Mongkut's University of Technology Thonburi. I'm a student in the electrical field but I was also interested in the application of plasma to the biological field. So, I was given a chance to study biology during this internship and engage in an experiment to "disinfect the surface of a mango with UV rays" in her lab. Dr. Orapin and her graduate students were kind enough to carefully explain the experiment in English to me who had almost no knowledge in biology. Thanks to them, the experiment went smoothly. They also talked to me whenever they had time and I was able to improve my communication skills in English. I'm grateful to Dr. Orapin and the members of her lab who gave me such a previous opportunity.



Presenting his works in English



Taking lunch with Prof. Orapin and her students

Bulletin Board

★ Exchange program with Hanbat University and Internship program to University of Saskatchewan are going to be held next year period too

Those two programs we introduced on this quarterly: Exchange program with Hanbat University and internship program to University of Saskatchewan will carry out in 2019, too. We will start accepting applicants in May (Hanbat Univ.) and in August (Saskatchewan Univ.) respectively. Those who are interested in participating these programs, watch out the advertisements will be putting on the wall.

The editor's note

★ Assoc. Professor Yoshihara gave us a help for editing this issue. We are really grateful to him. We are going to carry those brilliant professors or students in this KENGURO quarterly in 2019 continuously.

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