Quarterly Newsletter vol.22

Featured !!

- Sakura Science Exchange with Mongolia, Taiwan, and Thailand!
- 5 Month Student Exchange at King Mongkut's University of Technology in Thailand!
- Participation in National University of Mongolia's 80th Anniversary!

Sakura Science Exchange with Mongolia, Taiwan, and Thailand!

With support from Japan Science and Technology Agency (JST)'s Sakura Science Plan, Kenguro has been exchanging and engaging with students from across Asia since 2014. Activities have been held online as of the emergence of Covid-19, but with the restrictions on sending and receiving university students gradually being lifted in Japan, we were able to invite students from throughout Asia again after around three years of being unable to do so. Between September 4th and September 10th of 2022, a total of 11 undergraduate and graduate students were invited from the National University of Mongolia, Mongolian University of Science and Technology, and the University of the Humanities in Mongolia; the National Kaohsiung Normal University in Taiwan; and Naresuan University as well as Silpakorn University in Thailand.

In -person Student Exchange for the First Time in 3 Years

An official ceremony was held upon the Asian student's arrival at lwate University, and after Department Chair Yashiro's opening remarks, the guests were shown a video introducing the school, which was produced during the 2020 Sakura Science Online Exchange. Following that, two doctoral students provided presentations on their research. Towards the end of the event, a segment titled "My Country, My University" was held, in which students from each university spoke about the culture, cuisine, and lifestyles of their countries, as well as the university they were visiting from. In the afternoon, participants were divided into three groups to separate into each lab room, headed up by Professors Tanaka and Konno of the Graduate Course in Design and Media Technology, as well as Professor Kobayashi of the Graduate Course in Electrical, Electronic, and Communication Engineering. See below for an outline of their activities.

① Group A (Prof. Tanaka's Lab): The group discussed the traits of traditional gift packaging found throughout Thailand, Mongolia, and Japan. They visited Morioka Handcrafts Village and took a look at industrial products, local food, and other traditional commodities, and upon visiting commercial facilities in Morioka, the group also learned about the various specialty products found throughout lwate and its surrounding regions as well. After, they discussed the characteristics of Japan's traditional food packaging from a design point of view, as compared to participant's countries.

⁽²⁾ Group B (Prof. Konno's Lab): The group printed a model using a 3D printer. After discussing what kind of object they would produce, they modeled it using 3D software. After carrying out repeated trial productions, they finalized the model and conducted a print using the 3D printer. With 3D printer output taking significant time, the group also discussed how to figure out appropriate print times, etc.

③ Group C (Prof. Kobayashi's Lab): The group learned about three-dimensional biological sensor technology through the creation of electronic circuits that measure heart activity. Since participating students were new to circuitry production, they began with basic principles, and then progressed to learning about biomechanics for use in measuring heart activity as electrical signals. The group also visited historical museums and art galleries to learn about the history and culture of lwate.

On the last day of the visitors' stay, a presentation was held in which each group delivered the results of their lab activities. After the program certificate reception ceremony, the students head over to Tokyo and returned home safely via Narita Airport.

(Right) Group A's visit to Morioka Handcrafts Village, in which they learned about the regional history of Japan through making traditional dumplings of Iwate Prefecture, etc.





(Left) Group B discussing the model they will produce. Students from differing cultures worked to overcome c o m m u n i c a t i o n hardships.

(Right) Group C makes new discoveries by measuring their own heart activity using circuitry they built themselves.





(Above) Group photo taken after the final day presentations and certificate ceremony

5 Month Student Exchange at King Mongkut's University of Technology in Thailand!

With the support of the JASSO Study Abroad Support Program*1, students spent about five months, from August to December of 2022, studying at King Mongkut's University of Technology Thonburi (KMUTT) in Thailand. Exchange with KMUTT began around 10 years ago through Mr. Pairintra (1988 Ph.D., Graduate School of Agriculture), who currently serves as a professor at the school. Our Electronic Communications Course Associate Professor Daibo serves as the program's coordinator, and so far 9 students have been accepted for internships, 10 have been sent, and 2 have been sent as exchange students. During the Covid-19 pandemic, 8 of our students also participated in KMUTT's international graduate thesis event, in which they gave online presentations. Below are a few words from Mr. Sawada of the City Planning Laboratory (headed by Professor Masaaki Minami), who studied as an exchange student at the same school.

Mr. Shogo Sawada, Graduate Course in Regional and Community-

On the recommendation of the coordinator at KMUTT during my study abroad in Thailand, I was invited to participate in an initiative to restore a canal in Bangkok, which was on the decline due to the use of cars, motorcycles, and buses. In meeting with over 10 of the initiative's members, I was able to learn about the history and current context behind the canal near the university as well. I also visited the site as part of a study along with other classmates studying abroad, and was able to speak with local residents to gain a better understanding of the issues they face. In addition to the instructors, the event was also attended by local business owners and residents that provide canal services such as canoeing, and I could see that they were working hard towards the development of the area. Efforts are also being made for future improvements to public services around the canal, such as restrooms, as well as to transportation to urban areas, and boating waterways. When we actually conducted our survey of the area, we found that the region around the canal was residential, and many people that live there make use of it throughout their daily lives, such as for doing laundry, as a means of transportation, and as a place to play for children. However, with the environmental issues, such as poor waste disposal and water quality, I definitely felt the importance of improving the canal.



(Above) Residences along the canal



(Above) At the meeting (Mr. Sawada is on the right)

Participation in National University of Mongolia's 80th Anniversary!

From October 3rd through 10th of 2022, Professors Konno and Tanaka, as well as Associate Professor Matsuyama, Graduate Course in Design and Media Technology, along with Vice President Yabu and university administrators, participated in National University of Mongolia (NUM)'s 80th anniversary ceremony and the Mongolia Japan Study Abroad Fair. As our university partner, our school's Faculty of Science & Engineering works towards developing academic and student exchange*2 with NUM, and 9 of our graduates are enrolled as faculty members at the university.

NUM's 80th anniversary ceremony was held in the capital, Ulan Bator (Ulaanbaatar), over the course of three days from October 4th through 6th. At the commemoration held at the Parliament Building on the second day, speeches were delivered by NUM's president as well as guests from their overseas partner universities, and a video summarizing NUM's initial establishment and its history since then was

also shown. Participants were also introduced to a large-scale initiative under current development, as well treated to an orchestral performance. Upon the ceremony's conclusion, participants joined in a social gathering along with Vice President Yabu and members of the International Student Alumni Association. Participants also strengthened ties in regards to research through their visits to the laboratory of Professor Enkhbayar, a graduate and current faculty member of NUM's School of Applied Sciences, and a 23 employee venture company working in metaverse system development.

The Japan Study Abroad Fair was held over two days on October 7th and 8th, at the JICA Mongolia-Japan Center for Human Resources Development. Around 200 students visited our booth, and many seemed interested in software, digital graphics, and AI. We look forward to an increase in the number of international students in the future!



(Above) At the Parliament Building, venue for the NUM 80th Anniversary Ceremony. Along with its massive bronze statue of Genghis Khan, the founder of the Mongol Empire.



(Above) Meeting with international student alumni, together with 9 alumni and students.



(Above) At the Japan Study Abroad Fair, a member of our university's faculty also gave an explanation of the program.

Message from the Editor

How has your new year been going? It was our pleasure to be able to introduce you all to the Sakura Science initiative after being unable to for the past three years, as well as our student exchange with King Mongkut's University of Technology, and our participation in the National University of Mongolia ceremony. We believe these experiences were no doubt very meaningful and transformative for all those involved. While the Covid-19 situation still continues, we're working towards returning to regular inter-university exchange, little by little. With that said, we sincerely hope for the further development and success of all our students.

Editor's Office:

Special Committee on Globalization of Education and Research

Email: kenguro@iwate-u.ac.jp

019-621-6405

http://www.kenguro.iwate-u.ac.jp/

Kenguro Website



^{*1 :} A Young Global Researcher Development Program overseas research internship for Ph.D. students and applicants (Program No. HTB2210200202)

^{*2 :} Refer to Quarterly Newsletter Volume 8 for information on exchange between Mongolia and the Faculty of Science and Engineering