Student Reports of the Global Fellows Programme in Tokyo 2023



Takahiro YAMABE
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In September 2023, I had an opportunity to join the GFP as a member of the School of Life Science and Technology, TokyoTech. The theme of the program was "Sustainable Water and Energy." The program was held in Tokyo for one week, and students and staff from TokyoTech and Imperial College London participated. I was a member of a team of six, and we had discussions to prepare for the final presentation. During the first three days, we did team-building activities and brainstorming. Most of the members were from

different countries and had diverse backgrounds. Therefore, we faced language barriers but overcame them by respecting and helping each other. We also utilized respective fields of expertise for the project. Based on my expertise in biology, I contributed to the proposal section on bacteria. On the final day, we gave a presentation, and our group was awarded the GFP Special Prize.

During the program, I gained a lot of valuable insights. Firstly, I learned about the challenges and significance of working with people from diverse backgrounds and varied skill sets. However, I also discovered that it's possible to work on a project while respecting and supporting each other. Being the only Japanese person in the group, I was often asked questions about Japanese culture, but I realized that there were many things that I didn't know. This ignited my curiosity to learn more about Japan, the country where I was raised. Additionally, we had to discuss and make a presentation in English. Even though English was not my strong suit, I was able to improve my language skills through consistent practice. Lastly, the program enabled me to make many new friends, and I look forward to staying in touch with them in the future.

I would like to strongly recommend this program to doctoral students who have limited opportunities for international exchange. By interacting with various cultures in a week, you can not only broaden your perspective and deepen your expertise but also gain insights into your own country's culture. Additionally, collaborating with individuals from diverse backgrounds enables you to apply your expertise and gain new perspectives. Furthermore, you can enhance your English skills by delivering presentations in English. In this way, I believe this program is very meaningful for doctoral students. Since there is a pre-learning time, even those who are concerned about their English skills can participate with confidence.

In addition, I would like to express my sincere gratitude to the GFP staff, the professors, and the students who supported me during this program.



Vinayak GUPTA

Department of Transdisciplinary Science and Engineering School of Environment and Society, D2

The Imperial-Tokyo Tech Global Fellows Programme 2023 (GFP) took place from the 18th to the 22nd of September, serving as a platform for doctoral students from Tokyo Tech and Imperial College London to come together and collaborate on finding solutions for a global issue. The focus of this year's program, being a pressing issue, was on the academic theme of 'Sustainable Water & Energy,' with a particular emphasis on addressing the United Nations' Sustainable Development Goals of 'Clean Water and Sanitation' and 'Life Below Water.'

There were 30 participants, with 15 representatives from each institution, engaged in six days of intensive activities, including group discussions, poster presentations, and thought-provoking field trips. The activities were gamified to inculcate cooperation among the team members and to develop leadership skills. As said, the program aimed to cultivate essential skills such as leadership, interdisciplinary and intercultural awareness, as well as effective communication, and simultaneously fostering valuable networks necessary for successful collaboration.

The finale of the program was assessed by a poster fair on the final day, during which each team presented their proposed solutions for sustainable water and energy. Our team proposed the idea of "Back-to-Watt" which is an initiative to use electrogenic bacteria in a portable power bank, which serves a dual purpose, to reduce waste (kitchen waste or wastewater as organic material), and give out energy in the form of electricity. The team with the most commendable solution received recognition from the esteemed members of the board. There were two teams to win the prize, however, my team was awarded the best collaboration spirit award which indeed boasted our passion for working together and in harmony.

The overall experience of the Imperial-Tokyo Tech Global Fellows Programme 2023 was enriching and fulfilling for all participants, including me. It provided a unique opportunity for doctoral students from both universities to engage in meaningful discussions, cultural exchange, and interdisciplinary problem-solving. The emphasis on the Sustainable Development Goals underscored the importance of addressing pressing global issues, fostering a sense of responsibility among the participants.

The Imperial-Tokyo Tech Global Fellows Programme serves as a valuable platform for fostering international collaboration, nurturing leadership skills, and inspiring innovative solutions to critical global issues. It remains an essential initiative in promoting sustainable development and nurturing a global community of responsible and



Jin WEN
Department of Social and Human Sciences
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I'm delighted that I had the courage to apply for this program, even though its theme, "Water and Energy," initially appeared unrelated to my research. Through interdisciplinary communication and collaboration, I discovered ways in which my

research could contribute to a subject seemingly unrelated to my own. This experience has underscored the idea that our research possesses more potential than we might initially believe. While prizes were offered, the true value lies in the exchange of ideas, not in winning or losing.

I am also deeply grateful for the opportunity to interact with dedicated teachers, staff members, and outstanding students from both schools. Many of them possess qualities I aspire to develop. My encounter with Team One left a lasting impression on me. I was impressed by their quick brainstorming sessions and appreciative of my teammates' patience in listening to my views. I wish everyone the very best in their research endeavors and in life. Our time in this program has demonstrated the power of collaboration and the limitless possibilities that arise when we venture beyond our comfort zones. Thank you for this enriching experience.



Anindhita

Department of Transdisciplinary Science and Engineering School of Environment and Society, D2

Uni Team: Our Journey of Self-Discovery

Our team, Uni, draws its name from my delightful memory of *uni* (sea urchin) ice cream in Hokkaido, embodying unity. Comprising students from different universities and fields, we've come together with a shared purpose. Despite our diverse characters, we quickly forged strong bonds. There's a unique synergy among us; we complement one another and have become a cohesive, effective team. This harmony made us the fastest

team to finish the lab attack challenge. We spent ample time together, even beyond the program, often over meals like (uni) sushi.

This year's program focus on Sustainable Water and Energy perfectly aligns with my research in energy policy. While our backgrounds span chemical engineering, ecology, and epidemiology, we faced the challenge of harmonizing our expertise. Through a well-designed program blending relevant academic content with teambuilding activities, we conceived the Fertigas program. Fertigas is an initiative providing clean fuel and fertilizer solutions from agricultural waste and human excrement tailored for sub-Saharan East and West Africa. Although not the most creative idea or presentation, I wholeheartedly believe in its practicality and potential to make significant strides toward the Sustainable Development Goals.

For me, what began as a pastime had evolved into a tightly-knit friendship and a truly enriching experience. I am continually struck by how Uni Team, bound by shared passion and purpose, has not only shaped a more sustainable and inclusive future but has also left an indelible mark on each of us. I realized that our journey of self-discovery was profoundly shaped by the Imperial-Tokyo Tech Global Fellows Programme, providing us with the tools and experiences to tackle challenges with newfound unity and purpose. I extend my heartfelt gratitude to the program committee for their invaluable support and guidance throughout this remarkable journey.

Yuxuan LIU

Department of Transdisciplinary Science and Engineering School of Environment and Society, D1



I had an enriching experience at GFP2023. The main task in GFP2023 required us focused our efforts on a poster presentation in a team centered around the theme of water and energy. Our Group 5 choosed to explore the fascinating concept of bioelectricity. The collaborative spirit within our team was enhanced through engaging activities such as drawing, ethical discussions, problem-solving games like "attack the bridge," and puzzles, with highlights including the creatively themed "sticker man" and "Picasso-style" art. Final, our hard work and cohesive group dynamics paid off as we

were honored with a special award, affirming the exceptional quality of our presentation and the strength of our teamwork.

To further enrich our cultural experience, we had the opportunity to embark on a Meiji shrine tour and participate in a traditional Japanese tea ceremony, allowing us to immerse ourselves in the rich heritage of Japan. The Meiji shrine tour provided us with a glimpse into Japan's rich spiritual traditions, allowing us to appreciate the serene beauty of the shrines and the profound cultural significance they hold. The traditional Japanese tea ceremony was a sensory journey, immersing us in the intricacies of this age-old practice. These experiences were not only educational but also left a lasting impression on our group, fostering a genuine appreciation for Japanese culture.

GFP2023 was an energetic and enlightening experience that not only broadened our knowledge but also enabled us to make new friends from diverse backgrounds, leaving us with valuable memories and a sense of accomplishment.



Munkhsuld ENKHUUR Department of Transdisciplinary Science and Engineering School of Environment and Society, D3

The Global Fellowship Program 2023 brought together a diverse group of PhD students from various countries, all dedicated to addressing the pressing challenges of sustainable water and energy. The program aimed to facilitate knowledge exchange, interdisciplinary collaboration, cultural understanding and enhance the participants' research capabilities.

At the beginning of the programme, participants were assigned into groups that combining Imperial College London and Tokyo Institute of Technology students and had team building activities to introduce our research topics and encouraged to familiarize ourselves with each other's skills, knowledge and interest. This preparatory phase allowed us to identify potential areas of collaboration and establish a foundation for our final goal.

We attended seminars conducted by renowned professors and experts from Tokyo Institute of Technology and private company, covering a wide range of topics related to sustainable water and energy. The sessions provided valuable insights into the latest advancements, research methodologies, and interesting technologies in the field.

The program provided an excellent platform for networking with fellow PhD students, researchers, and faculty members from different countries. The interactions fostered lasting connections, enabling future collaborations and exchange of ideas beyond the program's duration. The knowledge gained and connections established during this program will undoubtedly contribute to our future research endeavors and efforts towards sustainable development. The program offered a unique opportunity to experience different cultures and traditions. Engaging with participants from diverse backgrounds enriched our understanding of global issues, fostered mutual respect, and promoted cultural sensitivity.

I would like to express my sincere gratitude to the organizing committee, faculty members, and fellow participants of the Global Fellowship Program 2023 for their support, guidance, and contributions to making this program a success. Additionally, I extend my thanks to Imperial College London and Tokyo Institute of Technology for their collaboration and dedication to fostering international research cooperation.



<u>Kazuaki MISHIMA</u> Department of Information and Communication Engineering School of Engineering, D1

I got many things from this program. I think this should be a special memory in my phd. Before this program, I was not so confidence to speak English because I'm Japanese. But this program kindly offered to me some English conversation lessons before this program started. That was useful for me, and I could prepare for using English. In the program, I learned many things. For example, how to solve those problems around Water and Energy to save, how to make it together among the team members having different backgrounds, how to discuss in English…

Moreover, I met many nice people of Imperial and Tokyo Tech and I could get many friends during this program. I think this is going to be an important connection as a researcher. I would really appreciate for giving this great opportunity.



Minami IMAMOTO Department of Life Science and Technology School of Life Science and Technology, D2

It was such an honor to receive a precious opportunity to join an Imperial-Tokyo Tech Global Fellows Program. My motivation to attend this program was to experience something new and stimulating which hardly happens in my ordinary life as a Ph.D. student. Besides, there are not many chances to participate in the international program which is exclusively targeted at Ph.D. students, making me curious to see the fusion of various research backgrounds.

The entire program was excellently designed to promote building bonds among group mates, facilitating deep discussion related to the theme "water sustainability," and arranging a final presentation within a very limited time. We were divided into several groups consisting of six people: three students from Imperial and three students from Tokyo Tech. As you may guess, we all met each other for the first time on the first day of the program even students from Tokyo Tech but all the teammates were welcoming and accepting of each other, and I have never felt hesitation to share my opinion and engage in group work. Our teammates had various personalities, ethnicities, and research backgrounds and I strongly believe that we could have never achieved a great final presentation without our diversity.

In the end, I would love to say thank you so much to all the people who made efforts to organize such a wonderful program and it was a great pleasure to see all the friends met in this program. I am proud of myself for accomplishing the 5-day program and I am sure that the experience of inclusive teamwork and collaboration with specialists would be the solid foundation of my future career as a global researcher.



Kanokwan YAMSOMPHONG Department of Transdisciplinary Science and Engineering School of Environment and Society, D2

The GFP23 represented a unique partnership between two prestigious institutions, Imperial College London and Tokyo Tech. This collaboration provided an extraordinary opportunity to work together with fellow PhD students from these two institutes under the academic theme 'Sustainable Water & Energy'. This exciting opportunity allowed me to expand my worldview and offer a new perspective on my research with fellows and mentors from diverse backgrounds.

During the program activities, I did the ice-breaking activities to get to know each other better before working together in a team to make a research proposal. Even though we have different backgrounds, we could merge our expertise and work together. We could unlock new opportunities for conservation, renewable energy, and improved emergency response plans. Our team proposed the idea of 'Shifting the Lens: Moving away from emergency responses towards adaptation to extreme events, which won us the 'Winning Team award'.

Apart from the academic knowledge I have gained, I learned and experienced collaboration and teamwork with people from various backgrounds, including culture, institutions, and research fields.

I am grateful to have met and collaborated with so many talented individuals who have now become not just colleagues but friends!!



Antonio ARAUJO DIAS
Department of Chemical Science and Engineering
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I had the amazing opportunity to participate in the third edition of the programme, held in September 2023.

I was a little nervous at first because I had very little information on what the activities were going to be like and I did not know any of the other people participating in the programme. But all doubt quickly went away on day 1, when I finally met the other participants, the most amazing and welcoming people, both from Tokyo Tech and from Imperial. The participants had various backgrounds, with different cultures, nationalities

and research themes and being able to work with such a group was a unique experience.

Overall, it was a hectic week, full of work and discussions, but I had a lot of fun. I feel all presentations and activities were insightful and they helped me not only to polish my communication and group working skills but also to better understand the theme of clean water and energy, which I hope to incorporate into my research in the future. Most importantly, I was able to make truly meaningful connections with my teammates. Everyone was so engaged in the activities that in the end it was hard to believe that we had not known each other for a long time before the programme.

I am immensely grateful for this experience and I would most certainly recommend joining the programme to anyone considering it.