

**THE EXPECTATIONS
AND OUTCOMES OF
THE GRADUATE 2020
PROGRAM IN THE
DEPARTMENT OF
CIVIL ENGINEERING**

08



The Expectations and Outcomes of the Graduate Program in the Department of Civil Engineering

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Preface

The International Students' Association in Civil Engineering, known as ISACE in short, is the official student association in the civil engineering department. It was formed on the 11th of March, 2011 after the great east Japan earthquake, in the wake of encouraging unity & improving international students' safety. It became an establishment that bridged the gap between the students & the department with the purpose of smoothening the life of the graduate students in the department and make their journey more pleasing and enjoyable. The ISACE organizes several events every year, like the welcome party for new students, field trips, and a symposium, the symposium being the most important event of all.

This year in 2020, the symposium was aimed at bringing together the alumni members and the current students to interact and discuss "**The Expectations and Outcomes of the International Graduate Program in Civil Engineering,**" giving an overview of international students. Unfortunately, the symposium was canceled amid the COVID-19 outbreak in Japan. Nevertheless, the student presenters and alumni speakers at the symposium provided their thoughts in the form of articles that have been published in this magazine, "**FSO Update 08**".

We would like to extend our gratitude to Prof. Fujino for his valuable time and effort in writing his thoughts to inspire our readers. We are also grateful to Mr. Uchibori, Mr. Peerapong, Ms. Ana, Mr. Amirfarkhan, and Prof Yan Wanglin for sharing their experience in the university and after graduation. Their words would motivate readers to work hard and never give up on achieving their goals. We would also like to thank the current students, Chirayu San, Li Yang San, and Kavalin San, for their efforts to write about their experience and expectations. We would like to express our sincere thanks to Eiji Hato Sensei, the Head of the Department, for writing the open letter titled, "In a city crisis."

Last but not least, we would like to thank Fuse Takashi Sensei, Hironori Kato Sensei, Takenori Shimozono Sensei, Yoshihide Sekimoto Sensei, Tomonori Nagayama Sensei, Abeki San and Toneyama San for their efforts, support and consistent guidance, without which it might not have been possible to publish this magazine.

With Warm Regards,

Kedar, President

Chandra Kiran, Vice President for Design & Internal Affairs

Rakan, Vice President for Social Affairs

Kavalin, Vice President for External Affairs and Social Media

Robiul, Vice President for Finance

From the Chair of Department

In a city crisis

Prof. Eiji Hato

Former Chair of Department



I am Chair of the Department of Infrastructure and Environment until last March. My specialize in urban planning and transportation planning, and when faced with the Great East Japan Earthquake nine years ago, I immediately began to investigate the site. From Sendai to Ishinomaki, Onagawa, Kesenuma, Rikuzentakata, Ofunato, Kamaishi, Otsuchi, Miyako, and Hachinohe, on-site. We conducted a survey.

Now, because of COVID-19, we are not able to do any fieldwork, but we were able to do the same thing in Fukushima. It has been difficult to get into the field, and when we were allowed to go into the field, we had to wear protective clothing. We were finally able to get permission to do an on-site inspection, monitoring the radiation levels. I remember that it was very hard to go through the investigation with trepidation. After that, we established a new research organization called the Reconstruction Design Research Course with the support of the company, and we have been working on the development of a new research system. The Center for Reconstruction Design was established at the site in Fukushima. After resuming activities for the new recovery and repeating workshops with citizens, last year, we finally found a way to restore Fukushima The Reconstruction Exchange Center has been completed in Odaka. It's taking a long time.

Whether our society will be remote or returned to realspace in the future is a question for everyone to decide. Some Japanese companies believe that there is a trend toward a more remote society. On the other hand, others say that the remote is useless when it comes to complex disasters. Which is the answer? This year, all of my undergraduate courses have been changed to digital exercises, and I am finally able to open the Digital Urban Design Studio. Students' skills in urban representation using digital 3D drawings, traffic simulation using location data, and programming have improved dramatically.

On the other hand, all of us are struggling to find out about real people's lives and their problems. It is very difficult to think about the real problems, whether they are digital or real, and what the problems are in the region I think it's important to think thoroughly about what the problem is and how to solve it.

It may be difficult to find out the meaning and value of studying in Japan in such a situation. I don't. But on the other hand, while the world is going through this situation, it is not only COVID-19, but also various other disasters There are many students, researchers and practitioners in Japan who are dealing with reconstruction and infrastructure, and they work in teams to do excellent work. We are working on it. I urge you to engage in good learning and continue your excellent research in Japan.

Experiences of Alumni

My remarkable experience in International Graduate Program at the Department of Civil Engineering, The University of Tokyo

Prof. Yozo Fujino

Professor Emeritus of University of Tokyo and Yokohama National University, and President of Josai University



I joined the department of Civil Engineering (DCE), University of Tokyo (UoT) as a faculty member in 1982, which is one of the important years in the history of DCE because the International Graduate Program (IGP) in DCE, UoT started in this year.

DCE, UoT had very limited number of overseas graduate students before 1980. They were mainly from Chinese character regions such as China, Taiwan, and Korea. In the doctoral program of DCE, there had been only several graduate students even including the overseas graduate students. To make DCE more research-oriented department like the ones at the Univ. of California, Berkeley, University of Illinois at Urban-Champaign, and Imperial College of London, DCE needed to strengthen the doctoral program.

One of the barriers for overseas graduate students to study at UoT was the requirement of the Japanese-based-written-examination for entrance examination. They had to take it in Japan, meaning that the applicants had to come to Japan in advance and spend one year to learn Japanese before the entrance examination. At the universities in the United States and Europe, admission to graduate programs are generally selected on the basis of their past academic performance and recommendation letters, not by the written entrance examination.

Prof Fumio Nishino (Photo 1), a very internationalized person who graduated from Lehigh University in the USA (Ph.D) was very keen to make DCE become more active in research and he persuaded the president of UoT to change the selection system for graduate program admission. Accordingly, the document-based-selection system was approved at UoT. In addition, he succeeded in obtaining

a large number of governmental scholarships for overseas students. He with his colleagues such as Prof. Hajime Okamura also convinced DCE faculty members to provide their lectures in English and this was agreed by DCE. The DCE, UoT international program characterized by documents-based admission, scholarships and lectures in English was very unique and innovative at that time in Japan.

The 1980s was a very good period in Japan. The economic development was remarkable, and Japan's economy became number 2 in the world after the USA with respect to GDP. Many looked at Japan with admiration. So, starting our international program in 1982, we had a large number of the applicants with high academic performance from all over the world.

The overseas students who enrolled to the DCE were not required to learn Japanese as a second language, but we thought they needed to understand conversation-level Japanese for their daily life. So, from the beginning, we opened the Japanese Language Class (JLC) program for overseas students within DCE. This class was managed by Mrs. Akiyo Nishino and several other lady teachers. One of them was my wife, Atsuko Fujino who took a special course on teaching Japanese for non-Japanese speakers at the International Christian University. The class was extremely popular among overseas students and it also served as a place for social interaction among teachers, overseas as well as Japanese students (Photo 2). The JLC program continues until now and the success of IGP in DCE of UoT owes so much to this program.

A Foreign Student Office (FSO) was founded probably in 1985. The role of FSO is to recruit overseas students and to accommodate their needs while studying in Japan in many aspects such as their academic life, housing, and even their personal issues. The FSO has played a very important role in the International Graduate Program (IGP), DCE of UoT. The first person in charge was Ms. Nagatomi and was succeeded by Ms. Keiko Nakagaki and Fusako Ide. I really appreciate the great contribution of FSO as well as JLC.



Photo 1 Professor Fumio Nishino



Photo 2 The first Japanese Language Speech Contest with teachers of Japanese Language Class, overseas students and faculty members in 1983 (First line from left Prof. Manabu Ito, Prof Fumio Nishino, Mrs. Atsuko Fujino, Sugiko Yokoyama, Akiyo Nishino, Nobuko Yamada, Junko Ishida, Akiko Maekawa, and Prof Hajime Okamura (second line second from the left)

Since 1982, our bridge and structural engineering laboratory headed by Prof Manabu Ito received at least three or four overseas students every year and I found that almost all of them are really excellent. Many pursued Doctoral course after finishing their master's program.

Due to the large number of excellent overseas students, research activities in our laboratory as well as all others in the DCE increased tremendously. The most important work to me was to provide exciting and interesting research topics to many of my students. A large number of long-span bridges were built in 1980's and many new technical challenges need to be solved. This means many new research topics were available for us. I assigned many new interdisciplinary topics to the students. Due to the academic contribution of my overseas students, I could establish a new research area called "monitoring and control of civil structures" which is internationally recognized in structural engineering field and I was very fortunate for this recognition.

Overseas graduate students are mainly from East and Southeast Asian countries such as China, Korea, Thailand, Singapore, Indonesia, but some were even from Europe such as France, UK, Poland and this makes the laboratories in the DCE very much internationalized (Photo 3). To recruit students from leading universities, Prof F. Nishino visited not only many of top universities in Asian countries such as Bandung Inst. of Tech. of Indonesia, Univ. of the Philippines, Chulalongkorn University. of Thailand, Univ. of Lahore Pakistan, Asian Inst. of Tech, and National Taiwan Univ., but also top universities in Europe such as École Centrale Paris, Imperial College of London, and Politecnico di Milano. His visits worked very well in building good relationship between the universities and encouraging

overseas students to come and study at DCE of UoT.

Large number of overseas Ph.D students gave a huge positive impact to Japanese graduate students. It was also good that the number of Japanese students who went to Doctoral program was also increased. I intended to convince our Japanese students to study abroad for their higher degrees, i.e. master's or doctoral degrees.

Until the 1980s, I sent the output of my research works mainly to technical journals in Japan, typically, the proceeding of Japan Society of Civil Engineering (JSCE) which were written primarily in Japanese. In the late 1980s, however, I started to send my research papers to international journals. Fig. 1 shows that the number of my papers published in international journals increased sharply since 1990s and many of our papers are well cited because of the quality due to the great contributions by our overseas students.

Mr. Benito Pacheco was one of the students in our laboratory who joined the first period of the international program. After finishing his doctoral degree in 1987, he was appointed to Assistant Professor and promoted to Associate Professor in 1990. He was the first one who became a faculty member from international program in a national university in Japan. An article on his promotion appeared in one of the major newspapers as shown in Fig. 2. Since them, more than few joined our lab as a faculty member; Drs. Binod Bhartia, Krystoff Wilde, and Su Di. This really activated the Bridge and Structure Laboratory.

For more than 30-year service until retiring from DCE, UoT in 2013, I have really enjoyed the academic interaction with my students including international students. The number of international



Photo 3 New year's home party with students from the UK, France, China and Japan and their family in Jan 1991

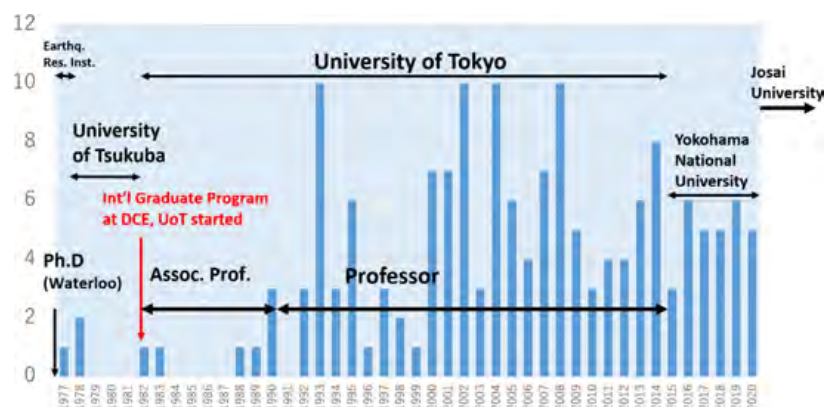


Fig. 1 The number of papers published in international journals that I have coauthored and my academic career

students I interacted with would probably exceed 100. I would like to thank all of them directly. I was so excited to know that DCE, UoT was ranked No. 2 in the QS ranking system in 2012. This was made possible not only by the academic performance and contribution of the DCE faculty members, but also the performance of our graduated international students.

I am writing this article in the time of Covid-19 pandemic. I can guess that this pandemic would have a huge impact to our society including our university systems. Online lectures now became very common, meaning one can listen to any lectures at any places. Based on my experience in Canada, studying abroad is not only listening to lectures, but it has many more dimensions such as cultural and societal. I do hope that this Covid-19 pandemic will be soon under control and many young fellows would be able to enjoy studying abroad in a safe and peaceful environment. Japan was relatively safe compared to other regions with respect to Covid-19, and this would be one of the attractive points of Japan. I also hope that the DCE, UoT international program will continue to be one of the internationally leading platforms in our professional area.

Arigato gozaimasita!



Fig. 2 Dr. Benito M. PACHECO (Univ. of the Philippines formerly Vice President) and his article

Design and Practice of International Program for Environmental Innovators

Prof. Yan Wanglin

Faculty of Environment and Information Studies, Graduate School of Media and Governance, Keio University.



Introduction

It is my great honor to be an alumnus of the Department of Civil Engineering, Graduate School of Engineering, The University of Tokyo. I have studied at the department from 1987 to 1989 for a master's, and 1989 to 1991 for a Doctor's degree. I have been work at the Faculty of Environment and Information Studies, Shonan Fujisawa Campus (SFC) of Keio University since 1993. SFC is the latest campus established in 1990 and started out with two interdisciplinary faculties—the Faculty of Policy Management, and the Faculty of Environment and Information Studies. Four years later, the Graduate School of Media and Governance (M&G) was created, offering masters and doctoral programs. M&G bridges a wide range of academic fields in one graduate school. The philosophy of education in SFC is that students are not trained to learn but to find and solve problems independently. To achieve this purpose, the graduate school trains students through project courses offered by faculty members in any of the following programs: Global Governance and Regional Strategy (GR); Human Security and Communications (HC); Policy Making and Social Innovation (PSI); Cognition, Sense-Making, and Biophysical Skills (CB); Environmental Design and Governance (EG); X-Design (XD); Cyber-Informatics (CI) and System Biology (BI). Unlike conventional education systems in other universities, these programs are not fixed. Faculty members are able to move around and cooperate with each other. Students are free to take any courses without any limitation of discipline. Above on the eight programs, SFC is flexible to open new academic programs and professional courses corresponding to social needs. The International Program for Environmental Innovators (EI) (<http://ei.sfc.keio.ac.jp>), for example, is the culmination of the collaboration of the EG and HC, PS and CI programs. Fortunately, I have got the opportunity to take the leadership of the design and management of the EI program in 2010. I would like to share my experience here with our alumni.

Design and Practice the International Program for Environmental Innovators

Keio University, the oldest university in Japan, has taken the initiative since the 1980s and has been making continual efforts to tackle environmental issues in the world. The university has committed to the development of an inclusive post-graduate *Program for Environmental Innovators (EI) for the Design of Future Society* within the Graduate School of Media and Governance (M & G) under the support of the Ministry of Education, Culture, Technology, and Science, & Sports (MEXT) from 2010 to 2015. Beginning in April 2011, the EI program aimed to be a global home in support of environmental leaders, with a particular focus on the dual challenges of mitigat-

ing and adapting to the risks of climate change. The curriculum of the program consists of four units: eco-business, environmental policy/planning, architectural and urban design, and social entrepreneurship. The four units are integrated as one, in pursuit of combining the actions of mitigation of and adaptation to climate change with balancing private profit and public interest. Graduates of the EI are expected to be leaders in creating a sustainable low-carbon society — for example, as managers of low-carbon businesses; as experts in environmental planning and policy analysis; as designers of environmental architecture and cities; or as environmentally minded social entrepreneurs acting locally and globally.

The EI program offers a Basic Track (one year), a Masters Track (two years), and a Doctoral Track (three years or more), as shown in Fig. 1. The *Basic Track* is designated for business people and employees of governmental organizations and municipalities, as well as for double-degree program students. In all cases, attendees can choose freely from a range of classes. Students who obtain a specified number of credits will be awarded the certificate of "Junior Environmental Innovator." A student who takes the track as part of a double degree program will be awarded "Environment Innovator Certificate," provided the partner university agrees to accept the credits earned as being equivalent to those in the EI program. The *Master's Track* is a full master program. Students will gain basic knowledge of skills and methodologies essential to their research activities, including scientific fundamentals of climate change, mitigation and adaptation concepts, and factors affecting private profit and public benefit. They will then acquire the more specialized knowledge needed in practice. In parallel, students are required to take "project courses and to participate in research projects. Finally, upon submission of their Master's thesis or equivalent, students will receive a master's degree and the certificate of "Environmental Innovator." The *Doctoral Track* is for students to embark on a doctoral degree. Students are required to set up a research theme independently and to advance in their research project progressively. For each student, an advisory group consisting of supervisors from three different research fields will be organized in the first year, to provide close daily research advice. A doctoral student is expected to clear requirements concerning foreign languages and education experience, and to present a research plan in the second year as a doctoral candidate examination. To qualify for a doctoral degree, students must complete two peer-reviewed academic papers and give at least one presentation at an international conference. He/she must submit a dissertation for a public hearing and sit a final examination. Students who pass the final examination will receive a doctoral degree and the "Senior Environmental Innovator" Certificate.

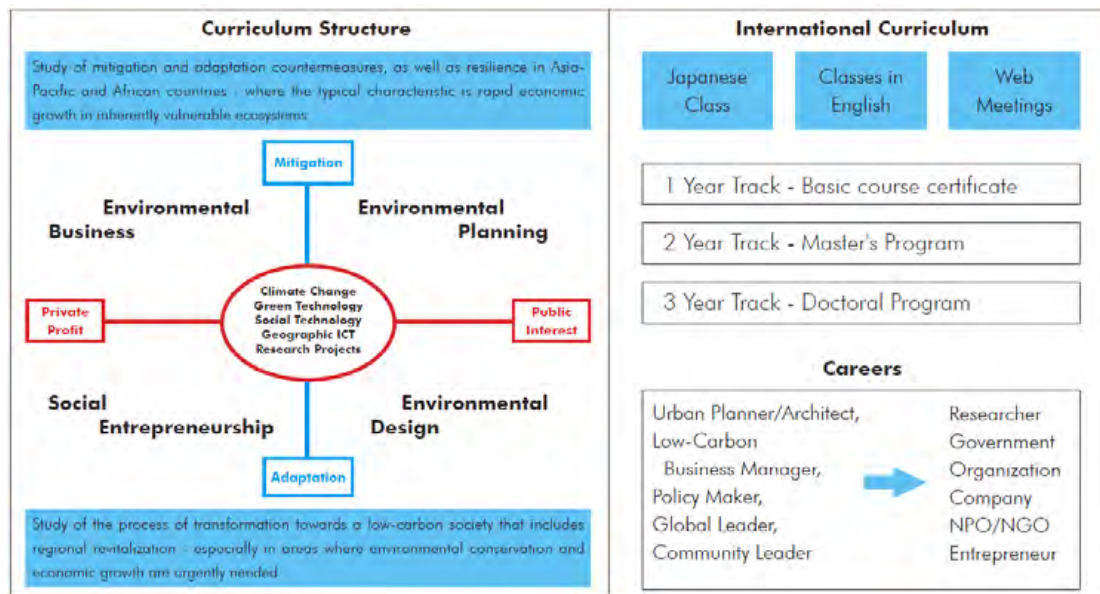


Fig. 1
Concept and curriculum of the International Program for Environmental Innovators

Graduates of the EI program, with their broad knowledge, specialized skills, and entrepreneurship, are expected to become environmental innovators domestically and internationally. International students will go back to their homeland and contribute to policy-making and technological innovation. With their devotion, the transformation of development to smart growth in developing countries will accelerate increasingly across the world. Meanwhile, graduates who work domestically will be key actors leading the transition to a low-carbon society in Japan.

Features of the EI program

With the Practical Learning ethos inherited from Yukichi Fukuzawa, the founder of Keio University, the EI program attaches considerable importance to collaboration between research and practice, and therefore it cooperates with many enterprises and local municipalities, both inside and outside Japan. Students and faculty undertake a considerable amount of fieldwork under the project-based learning and teaching scheme. The project courses are the core of project-based learning in EI's curriculum.

To avoid the potential problems arising from apprenticeship to a single supervisor, and to nurture the interdisciplinary spirit, each project course is offered by two or more faculty members. Students are able to take up to two project courses each semester. It is also possible to select different project courses. Students will make a formal choice of one supervisor and two co-supervisors in the second year. It is preferred to choose co-supervisors with different majors from any of the eight programs. Students are encouraged to acquire knowledge and skills in more than one specialized area. Master's students are expected to study several courses covering the fundamental concepts, skills, and methodologies designed to assist them in their research efforts in the first year. The students then proceed to study more specialized courses in the second year. Participating in practical projects, students can get experience and figure out what type of knowledge and skills they need to shape their careers.

The learning and teaching process is implemented by the Plan-

Do-Check-Action (PDCA) cycles, as shown in Fig. 2. Students will have the chance to write a proposal (P) applying for a research grant soon after they enter the program. If granted, they will be able to do (D) the project, with the assistance of supervisors. They can be off-campus for a long period to undertake fieldwork and internships with the help of distance learning facilities. All students must give a presentation to multiple supervisors to accept questions (C) at the end of a semester. The school also provides opportunities and financial assistance for students to attend a domestic or international conference for improving communication with academics and professionals. The diverse checkpoints give feedback to students to allow them to revise their plans and act further (A). The second-year for masters students will begin another PDCA cycle. Students are required to concentrate on their thesis research. They will formally decide on one supervisor and two co-supervisors at this time. Half a year before graduation, there is an interim examination for students to present their research progress in front of more than four faculty members. To apply for the Master's degree and certificate, students have to submit their masters' thesis and pass the final examination. Through these PDCA cycles, students will be able to learn how to write a proposal, manage a project, prepare presentations, and improve communication.

Achievements of the EI program

During the funded period in 2010-2014, a total of 164 students, including 16 of the basic course, 128 of masters, and 30 of doctoral students were graduated from the EI program, in which 80 of 164 were international students (Table 1). Students are engaged in studies of measures to mitigate and adapt to the effects of climate change in various countries and regions. Research of students covers a wide range of topics from the monitoring of glaciers in Himalaya mountain areas, development of flood early warning system in South East Asia countries, desertification combating in semi-arid regions, policy and architectural design for the penetration of renewable energy in Japan, social business and entrepreneurship for

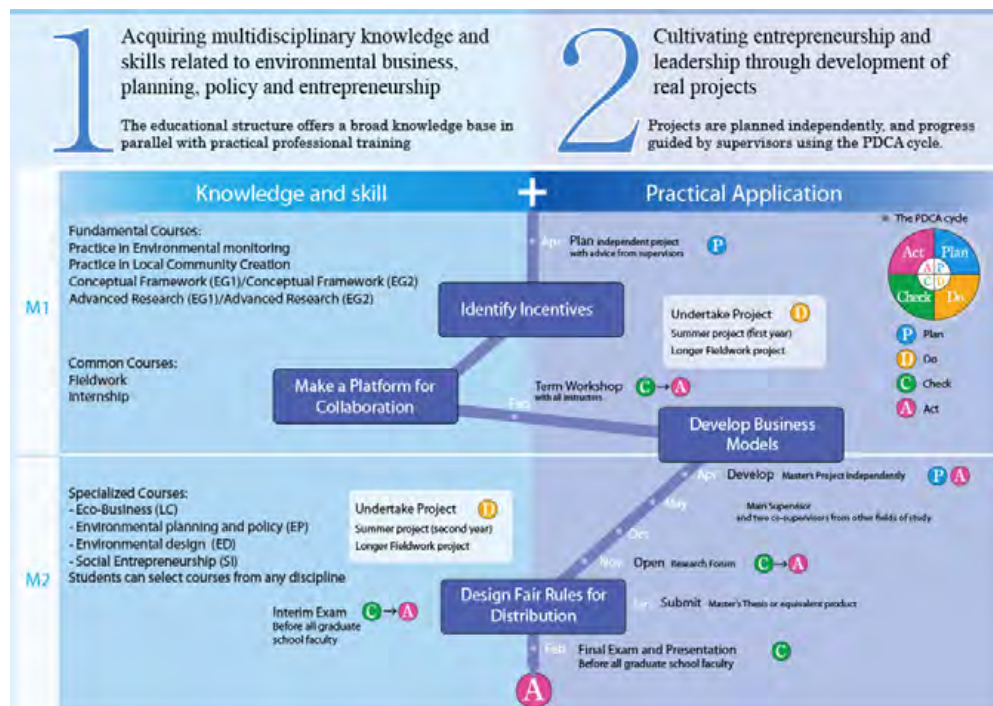


Fig. 2
The key concept of the EI: Project-based learning and PDCA cycle

community development, etc. A major effort was the multi-disciplinary reconstruction project against the Great East Japan Earthquake in 2011. The tsunami and nuclear power plant accident, triggered by the gigantic earthquake, brought unprecedented devastation to the Tohoku area of Japan. Even though the tsunami and the accident of the nuclear power plant were caused by the earthquake, coping with the disaster risk could produce invaluable experience for a future society in the design of mitigation and adaptation to climate change. Soon after the earthquake, the EI program has launched a campus-wide project to investigate the damage and design post-disaster reconstruction plans tied with local municipality and residents.

Closing Remarks

I am very grateful for the academic training at the Department of Civil Engineering (DCE), the Graduate School of Engineering, The University of Tokyo. The international graduate program at DCE nurtured me not only knowledge and skills but also international per-

spectives on global development. The multi-cultural atmosphere was the origin of my inspiration in the design of the EI program.

The EI program is an integrated program of natural science and social science to mitigate climate change effects on a global scale and adapt to impacts on a local scale. The communal design model provides a practical scheme for the realization of the best combination of mitigation and adaptation. Graduates of the EI program, with their broad knowledge, specialized skills, and entrepreneurship, are expected to become environmental innovators domestically and internationally. International students will go back to their homeland and contribute to policymaking and technological innovation. With their devotion, the transformation of development to smart growth in developing countries will accelerate increasingly across the world. With the global collaboration of environmental innovators, we will be able to live in a new environment that harmonizes with nature and is resilient to climate change. This is the future society that we are envisioning, evidenced by the success of the International Graduate Program at TODAI.

Table 1 Performance of the EI program during 2010-2014

Category	Basic	Masters		Doctors		Total
	Int'l	Japanese	Int'l	Japanese	Int'l	Total
Enrolled	16	71	47	13	17	164

Climate Change mitigation in Japan through Renewable Energy project implementation

'All that glitters is not gold' – William Shakespeare



Ms. Garcia Rogel Ana Gabriela

Project manager, Univergy

When asked about my professional career, I would simply describe it as a civil engineer, currently focusing on Renewable Energy Project Management and Development, but my journey to renewable goes some years back.

My journey started at the Civil Engineering Faculty and the Global Hydrology and Water Resources Engineering laboratory while I was enrolled in the International Graduate Program at the University of Tokyo.

My initial idea was to focus on water management and renewable energies, as my research developed further, I decided to focus on renewable energies.

At that time, many summits and efforts were taking place worldwide in order to stop global warming, among these efforts the renewable energy implementation was a very strong item on many International Institutions' agenda. This was put better into context when the COP21 took place late in 2015 in Paris, when more commitment from all the countries was requested to decrease the carbon dioxide emission.

Before this summit, earlier in the same year, the sustainable development goals started being draft and early 2016, the goals were

finally enforced. They included several topics, but also with a strong emphasis on climate change.

Even though as a result of both events, the Paris Agreement and the Sustainable Goals respectively came into force and were not legally binding to any country, they unlocked a massive window for Renewable Energies.

From that moment on, not only the R&D of renewable, especially solar was further developed and more investment started to be allocated for Renewable Energies.

The renewable energy boom started with a prime material as shiny as gold, the sun. The solar plant development has been the industry that has boomed the most since the renewable energy revolution started and Japan was not the exception.

In Japan the renewable energy boom started some year earlier than in the rest of Asia, this was mainly due to the great East and Japan earthquake and Tsunami which took place back in 2011. After three reactors at the Fukushima Daiichi were damaged, the official shutdown was commanded. This put in evidence the risks of nuclear energies and the Japanese Government implemented a tariff system



Fig. 1

<https://caricom.org/caricom-reiterates-commitment-to-implementation-of-cop-21-agreement/>



Fig. 2

for renewable energies in order to turn renewable into an attractive market for investors. Among all the energy types, Solar Energy has been the one further developed in Japan.

The facts that the renewable energy market was booming and still is, provided me with a great opportunity to stay in Japan and turn my theory into practice, as well as continue developing my cross-cultural working skills.

The Japanese renewable market still has a long way to go (per Fig. 3) and I am looking forward to the future challenges in order to be able to reach the forecasted energy mix and production.

Focusing after graduation on renewable energy projects, mainly solar and recently wind development, I have been able to be part of the impact I aimed to have since Graduate School.

Interaction with people related to different fields of study and work, and joining seminars of different kinds reassured me of my passion for renewable energies.

I highly encourage people enrolled in the International Graduate Program to take advantage of the classes that you can take together

with other faculties as well as of the available exchange programs with other Universities. You will have a chance to go out of your current research area, to gain insight on what other fields are researching on and it will open up doors for potential Inter-Institutional or cross-field collaborations, which have a strong potential to be groundbreaking.

Looking back, I would have never imagined I would be working in Japan and it has been an experience that has changed my life and professional perspective completely.

At the present point in my career, I still have a long way ahead and I am looking forward to the future challenges that will emerge during my career, while staying grateful and staying conscious that many of these opportunities had their early start back then when I was taking part in the International Civil Engineering Program.

- * Greenfield - Undeveloped sites for commercial development
- * COP21 – 21st Conference of the Parties. - This Convention was held in Paris in 2015 and had as the main goal to reduce the greenhouse gas emission to limit the global temperature increase.

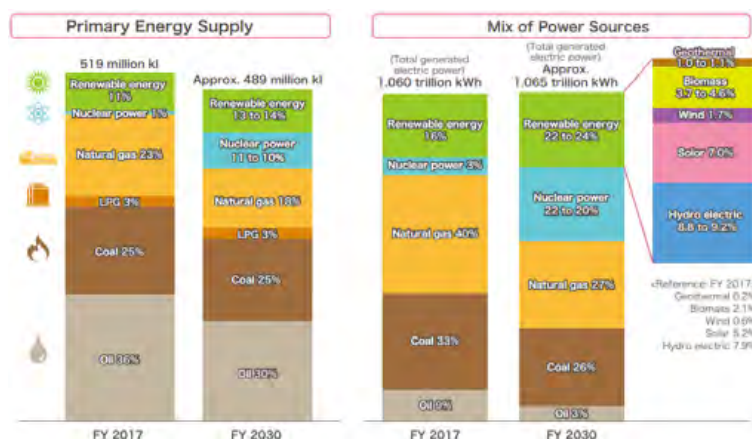


Fig. 3

https://www.enecho.meti.go.jp/en/category/brochures/pdf/japan_energy_2019.pdf

International Graduate Program; An Overview

Mr. Amirfarkhan Bin Radzali

Nishimatsu Construction Co.ltd.



Introduction

International Graduate Program is an initiative by the higher education institutions that provide the international community a chance to pursue education outside of their home country. The program ranging from short (exchange student program) to long-term (full-time study) benefits students through many aspects that will be discussed below and can be explained in terms of educational, cultural, and future prospects. From the perspective of students, joining an international graduate program is a major decision that will change their life thus challenges and measures to address the issues will be discussed.

Educational

One of the reasons international graduate programs took foreign student's interest is the quality of education. The quality of education encompasses specific courses that could not be taken at home countries due to the lack of experts in the course of interest or financially difficult to perform research. Hence, students with the aim of improving themselves and want to grow their potential to the fullest decided to pursue high-quality education that is valuable for their future endeavors. Furthermore, an international graduate program can be considered a hub for the gathering of global talent. Even though the term 'global talent' is mainly used for defining high-skilled, talented individuals in the workforce, it also explains the increasing trend of international students at the top-leading universities in the world who strive for better education and learning environments. In addition, discussions among people with different backgrounds provide diverse and unique perspectives on the ad-

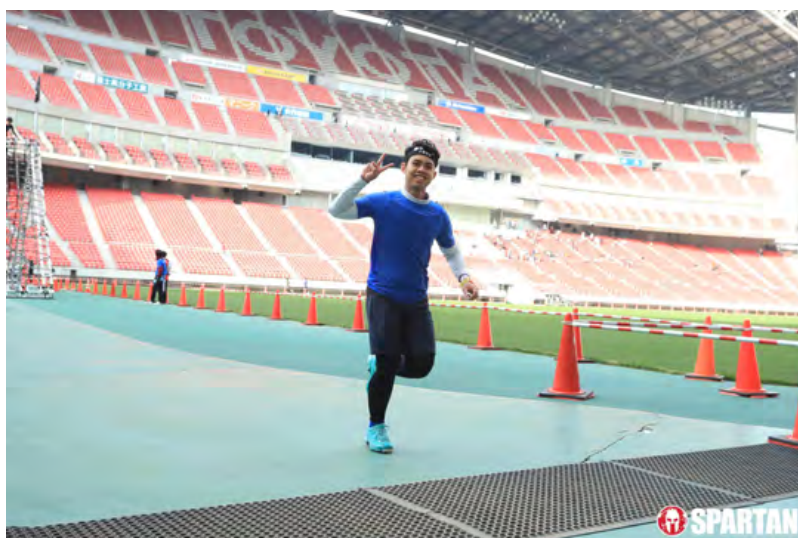
ressed topic. Above all, diversity promotes healthy competition among students that breed better outcomes and creativity.

Cultural

Interaction with different types of people broadens the mind and makes us understand each other. As human actions and reactions are strongly influenced by cultural backgrounds, the fastest way of understanding cultural differences is by living in a different country for a certain amount of time and interacting with the locals. The majority of students in an educational institution are the locals and as a foreign student, it is important to understand the local culture in order to clearly communicate and minimize misunderstanding. In accordance with globalization, multicultural understanding helps in building confidence in interacting with people with a different culture. The International Graduate Program is a gateway for students to experience a different culture and improve social skills while studying. The process of understanding other cultures forces the mind and stimulates it to think in various new ways. The thought process of other cultures might not be the same as their own culture hence cultural understanding improves mental capacities and helps in better communication.

Future Prospects

It is undeniable that joining the International Graduate Program will enable students to widen their personal networks by connecting with fellow students, professors, and industry professionals. This opportunity to connect with various kinds of professionals is an invest-



ment for their careers in the future. Connections serve as a platform to seek advice on what to do and what not to do from professional's perspectives and experiences. Learning from failure are important aspects in securing a better future and learning from other people's failure is the safest and fastest way to become knowledgeable in their own respective fields of study. The open network also helps in securing employment after graduation by having referrals highlighting positive qualities to a prospective employer. However, it is important to maintain them by regular follow-up by a simple email or phone call. Reaching out to those in the network strengthen the relationship and build trust therefore it is advised to not overlook this important aspect of maintaining a healthy connection.

Challenges and steps to overcome

Notwithstanding the aforementioned advantages of the international graduate program on students, there are challenges that will be faced when living and studying abroad ranging from language difficulties to culture shock. In order to overcome this barrier, it is important to tackle the issue without neglecting the limited proficiency in language issues and focusing on the activities where both parties could participate. The International Student Association with the help of the administration can host activities relating to the interaction with the local community that surely benefits both parties as international students bring cultural diversity and the interaction will deepen understanding of local culture. Volunteering in an English camp for elementary and high school students is also one of the activities that have a positive effect on the development of social skills by interacting with the locals. It can be run in cooperation with local or international charity groups to minimize the cost of hosting such events among multiple parties. Interpersonal interaction between different nationalities or cultural exchange will also help in nurturing effective communication while enhancing soft skills.

Conclusion

Taking everything into account, there are advantages and challenges in joining an international graduate program such as educational, cultural, and future prospects. However, these challenges are not difficult to overcome with the help of a strong and supportive student association and administration. Participation in multicultural activities is one of the methods to understand other cultures and communicate better with each other. Finally, being exposed to diverse types of people will stimulate the mind and make the study environment more interesting due to the high-quality discussions. In an all-round community, having a versatile attitude that can cope with diverse sets of people will surely help in work or private life.

Expectations of international students and the international student program in Civil Engineering from an industrial point of view

Mr. Hiroyuki Uchibori

Sumitomo Mitsui Construction Co.ltd.



Background on hiring foreign engineers

Since the age of the baby boomers reached their retirement age around 2007, the labor shortage in Japan has been gradually increasing. Therefore, many companies have adopted to rehire retired employees or employ women or non-Japanese individuals.

In the past, foreign nationals working in Japanese companies were limited. According to a survey by the Ministry of Internal Affairs and Communications, the ratio of foreign employees to total employment in 2008 was about 0.8%. Ten years later, in 2018, it has risen to 2.2%, and the number of foreign workers has tripled from 486,000 to 1.460 million.

In Japan, it was common for both parents to have Japanese roots, so-called Japanese, however currently, the number of people with a foreign origin has been increasing. I feel that a wide variety of people are increasing, especially in the sports sector. As an example, at the Rugby World Cup held last year, a number of players who have a foreign origin were selected as members of the Japan National Team. This is because the rules for the selection of rugby national team players are not restricted by nationality. I heard that gathering people with diverse backgrounds brought various ideas to the table, and using good ideas led to good results.

Incidentally, Sumitomo Mitsui Construction, to which I belong, has been hiring foreign engineers since 2007, and most foreign engineers belong to the Civil engineering division or Research & Development division. Currently, there are 14 members in the civil engineering division and seven members in the research and development division representing ten countries of origin. So far, many foreign employees have been in the company for less than five years, and it seems that it will take some time for the whole company to have a positive effect.



My impression of foreign employees

Regarding the impression of foreign employees who belong to our company, I feel they are excellent and dedicated. I think this is mainly because relatively highly educated technicians are hired. Even though the majority of the workforce consists of Japanese nationals, most of them can do the work while having sufficient communication with Japanese employees. Although it is not clear to me yet, I think that a variety of people has a positive effect on each other, both for Japanese employees and for foreign employees from different countries.

I have asked some of our foreign employees why they joined a Japanese company. Respondents said that Japan is a comfortable place to live and that Japanese companies have a high level of technical skills. Hence, they can enhance their abilities and have a place to play an active role.

On the other hand, I imagine that there may be some people who did not join our company just because it is a Japanese company. In the meantime, some people find employment in the same way as Japanese university students without being significantly noticed of their nationality. I think that foreign students are more sensitive to using their abilities and developing their own abilities than Japanese students.

Expectations of international students

I mentioned that the acceptance of foreign engineers is progressing as a solution to the labor shortage in Japan. There is also a ridiculous suggestion about having foreign personnel take on occupations that the Japanese do not want to have. However, we, Japanese construction companies that require comprehensive technical skills, actually want to recruit a large number of highly qualified engineers. In Japan, a further decline in the population is expected to occur in the future, and it is highly likely that there will be a shortage of human resources, even in the fields that require high technical skills. However, this is a chance for international students at Japanese universities to find room for acceptance in various fields and opportunities.

The working environment in Japan may be a bit special by world standards. Until now, it has been considered as the common practice in Japan to enter a company after graduation and work until retirement. After joining the company, the company invests in employees to improve their work skills and grow them into useful employees. Therefore, when joining a company, basic human skills such as thinking and communication skills are more important than technical skills. Personal career paths are not considered as premised on changing jobs. I think this idea was the most efficient way

to receive human resources investment. Even if the company couldn't grow some employees into the people the company wants them to be, there were still other places to play another active role, and they were able to change their career in their own way to working flexibly. At present, the mobility of human resources is more advanced than before. However, I think it is necessary for foreign students to understand some of the underlying ideas of Japanese companies that I mentioned. In other words, Japanese companies want foreign employees to work longer in return for giving them opportunities for growth.

Diversification of human resources, not limited to acceptance of foreigners, is one of the issues that Japanese companies are currently working on. There is a need for an environment that can accept not only age and gender but also various differences such as nationality and culture. As diversity advances, conflicts arise due to differences in values. However, it is said that new values can be created by fighting different values and respecting and inspiring each other. International students who have studied at Japanese universities are highly expected to make significant contributions in this regard.

Conclusion

Initially, in the international student symposium, I was supposed to make a presentation about the expectations of international students and the international student programs from the perspective of the Japanese companies, however, now it has been canceled in order to prevent the spread of the coronavirus (COVID-19), which is unfortunately now spreading worldwide. Even though this is a symposium for international students, I wanted to emphasize that the people that companies want to accept are the same for international



al students and Japanese students regardless of nationality.

Actually, what I know in detail is only about Sumitomo Mitsui Construction, which I am currently working on. When I joined the company about 20 years ago, the company had few foreign employees. About six years ago, foreign employees increased around me. Since then, foreign employees from various countries have been increasing.

As I mentioned above, it is from my personal experience that international students and Japanese students are required to have the same skills. I think the major differences between international students and Japanese students are Japanese language skills and culture as a background. As for the language, the problem goes away over time. It is important that cultural differences are accepted and respected by each other. Understanding Japanese culture and communicating the cultural values of your countries to Japanese employees is a good inspiration for the Japanese. I think that Japanese society will become more global in the future. I hope that it will be a good environment for people in all positions and that we can engage our strengths in such a way that everyone can play an active role.

I have limited knowledge about the modern international student programs, so I might be wrong, but I would like to propose to create more opportunities for engineering students to see Japanese construction sites or other respective factories. I think construction sites reflect Japanese culture deeply. At the same time, it may be a good idea to learn about Japan's disaster experience and the history of infrastructure technology.



Foreign Employees in Japanese Contractor: Contribution for Global Expansion

Dr. Peerapong Suthiwarapirak

Deputy General Manager, Civil Engineering Technology Division, Global Project Department, Shimizu Corporation.



Study and Life in University of Tokyo

After graduating from Chulalongkorn University, I got Japanese Monbusho Scholarship to study in The University of Tokyo from 1998 to 2003 for international program of Master and Doctoral Degrees. The international program was started in 1982 and more than 800 international students were completed the program and I was very proud to be one of the graduate students. This program let me learn about international environment and friendships. During five years of study program, I was doing research in Applied Mechanic Laboratory (Ohriki Lab) under the advises of Takashi Matsumoto Sensei. In our laboratory, graduate students from many countries, Iran, Italy, South Korea, Vietnam, Thailand could communicate very well with Japanese students by Japanese and English languages. The classes conducted in English and we could make new friends from other laboratories as well. Activities of lab members allowed me to have more chances to use Japanese language and Multi-national cultures. It was very helpful when I joined Japanese Company.



Fig. 1 Laboratory Ski Trip and Prof. Matsumoto's Home Visiting in Takamatsu

Potential Career Path and Selection

After graduation, foreign students including me have to decide our career path. I draw possible career paths as shown in Fig. 2. The keywords for my decision were "Civil Engineer", "International Link" and "Global Engineer"; therefore, I made my mind to join one of the biggest Japanese General Contractor, Shimizu Corporation in April 2004.



Fig. 2 Career path selection after graduation

Working as Civil Engineer in Japan – Learning of Japanese Technology

The first department after I joined Shimizu Corporation is Design Department, Civil Engineering Technology Division. 16 year-ago, I was only Foreign engineer among all Japanese engineers in Japan head office; therefore, Japanese language was indispensable in technical discussion. Although I passed JLPT level 1 during my graduate study, Japanese language for business was much more complicated. I did my best effort to learn not only language for business but also Japanese company culture, business manner, corporate style. The first task was to proof that foreigner engineer also can contribute as same as or better than a Japanese engineer.

During the first three years, I had learnt about *Japanese advanced technologies* and I worked as a design engineer for Japan energy facility projects, such as LNG/LPG PC storage tanks, Chemical Plants, piers, etc. Although, many people think that doctoral degree is over-qualified for working as an engineer in contractor companies, I think that the knowledges and thinking process I had learnt during doctoral degree could be utilized in my works. During the design of complicated structures, I proposed methodology to solve the problem and could applied complex numerical analysis promptly. Only three years after joining, I could contribute in many design works of complicated structures in Japan and overseas business. It was the starting point of my career as a Global engineer in Japanese Contractors.

Working as Global Engineer – Technology Transfer, Diversity and Globalization

In April 2007 I officially transferred to Singapore office under the Civil Engineer Technology Department, International Division. Similar to Tokyo or other big cities, the urban infrastructure construction in Singapore had many constraints which is required high-skill and experienced contractors. At that time, Japanese contractors had been very active in Singapore market because the contractors can *transfer those advanced technology* and experiences from Japan to Singapore. One of my interesting works in Singapore is MRT Project contract C905. This project had four TBM RC Segment tunnels excavated under the sea for the connection to Marina Bay Sands. By applying Japan's most advanced technologies of tunneling and ground improvement, we could overcome the difficulties in construction with time-constraint and completed the project successfully in 2010. Another success key is Singapore work environment where excellent talent gathered from all over the world. I realized that understanding "*Diversity*", motivating cross-cultural organization and creating teamwork are indispensable elements.

During ten years in Singapore, I played important roles as civil

and structure design manager and regional technical manager for large-scale infrastructure projects such as, Singapore water supply tunnel project and MRT projects, Jakarta MRT underground line No. 1 project, Ho Chi Minh first MRT project.

In 2017, I transferred to Bangkok office and was in the position of General Manager of construction departments. It was my first time to work in my home country. I considered that "Glocalization" can be one of the keywords to adopt for expanding global market. In Bangkok office, not only the technical parts, my work scope was included also business development as well as management roles. I try to differentiate and adapt company's global thinking to local standards to be able to our services to local needs and for client's satisfaction. Technology transfer between Japan and Thailand can be utilized through the projects. IoT, BIM, drone technology had been successfully implemented for project monitoring and management in Thailand.

From January 2020, I transferred back to Singapore office again but in the different role in new department called Global Project Department. During this 16-year working in Japanese Contractor, I felt the pleasure of "Monozukuri" when project complete successfully and I am proud to say that "Made by Japan" can guarantee high quality. We could disseminate Japanese advanced technologies to the world.



Fig. 3 Past experiences in international projects

Megatrend and Impact to Japanese Construction Contractors

1. Low birth rate and aging society of Japan

During 2000s, "Low birth rate and aging society" was the keyword driving Japanese Society. Many Japanese companies had realized about the decrease of population which may cause the manpower shortage in the future. For construction companies, the low birth rate and aging society will cause less demand of new domestic construction projects. The new markets such as, maintenance engineering and Life cycle evaluation for domestic projects and overseas business shall be explored.

2. Globalization and Tokyo Olympic 2020

In order to overcome the decreasing of Japanese domestic jobs and explain new market overseas in the early of 2010s, Japanese

Contractors have announced company vision which have more keywords in "Global Business". Shimizu Corporation also announced, "SMART VISION 2010" as a management policy in 2010. For global business field, the policy to contribute to infrastructure development mainly in emerging countries was launched.

In 2013, Tokyo was selected to be the host city for "2020 summer Olympic". Japanese Contractors have become very active and have been contributing in the construction of buildings and infrastructures for Tokyo Olympic. Japanese contractors again made effort on domestic project development for great success of the event. Japan nation expect that this Olympic can stimulate Japanese economy. However, the concern happens that after 2020 Olympic, Japanese domestic market will slow down again. Japanese contractors need to increase revenue share in global business. This year, for example, Shimizu Corporation announced SHIMZ Vision 2030 which have clear target to make the share of overseas business to be 25% by 2030.

3. Rapid Expansion of Chinese Contractors

Starting from the end of 2000s, China has rapid economic development and new infrastructure development and urbanization of

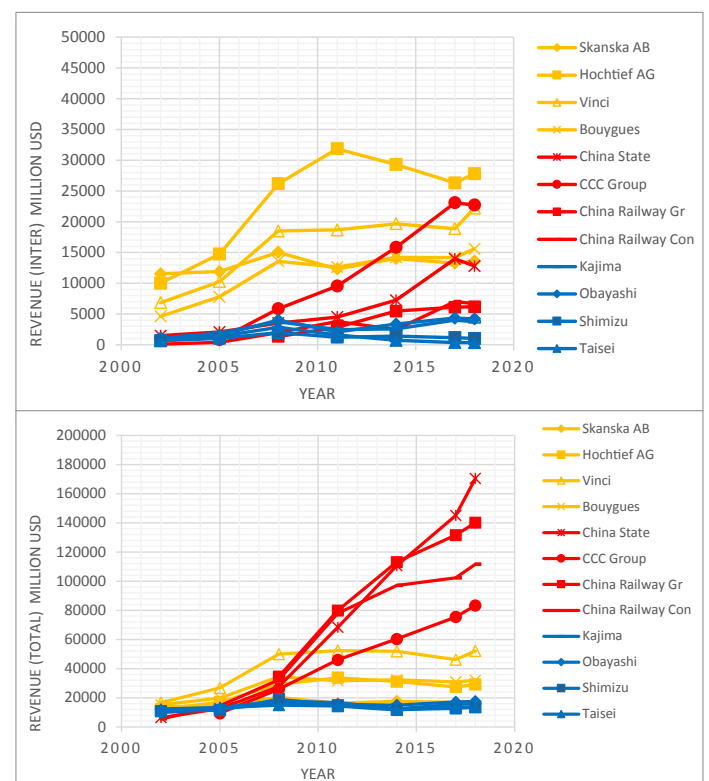


Fig. 4 Revenue (International and Total) of Contractors (Yellow-EU, Red-China, Blue-Japan)

cities. The information from Engineering News-Record (ENR) from 2003 to 2019 shows that there is a big jump of scale of Chinese Contractors as shown in Fig. 6 and 7. European companies have comparatively high ratio of international projects and scale of companies slightly increase during these two decades. Comparing to Japanese contractors, scale of company and revenue from international projects are still flat in these two decades.

For sustainability, Japanese contractors shall challenge more in global market. Chinese contractors have advantages in Economy of scale and human resources. Japanese contractors shall apply Innovation as one of success keys to expand global business and find out more collaboration with international partners.

4. Industry 4.0, Innovation and Digital Disruption

From the mid of 2010s, Industry 4.0, Internet of Things (IoT), Artificial intelligent (AI), Big Data, Blockchain, etc. are widely implemented in industry. In Japan construction business also, Building Information Modelling (BIM), i-Construction, Automated construction system have been introduced for promoting productivity. The digital and technology transform are moving on exponentially re-

cently. Japan from the past, advanced technology and quality are the strength of Japanese Industry. To utilize this strength, Japan contractors shall focus on innovation as differentiation strategy and use "Made by Japan" to guarantee quality and value to client.

Message to My Juniors

1. Career path shall be decided you decide by yourself not let people to determine your path. Strong intention will bring you to the path you want with your core competent.
2. Language Skill is as important as Communication Skill. During graduate study, try to use Japanese Language as much as possible. The more you learn Japanese language, the more you understand Japanese cultures.
3. Read books/e-books not only engineering or technical books. To understand Japanese culture and way of thinking, I suggest the books called "Bushido", "Ikigai" and "The Analects and the Abacus".
4. Always Learn new technologies, Innovation, AI, IoT, i-Construction, Cloud etc. These can be implemented in productivity improvement.
5. Do not need to be number one but you shall be only one. You can contribute in your own way and be expert in your field. It is the meaning of SMAP Song - "Sekai Ni Hitotsu Dake No Hana" or "The only flower in the world". This song has also the meaning of "Diversity".

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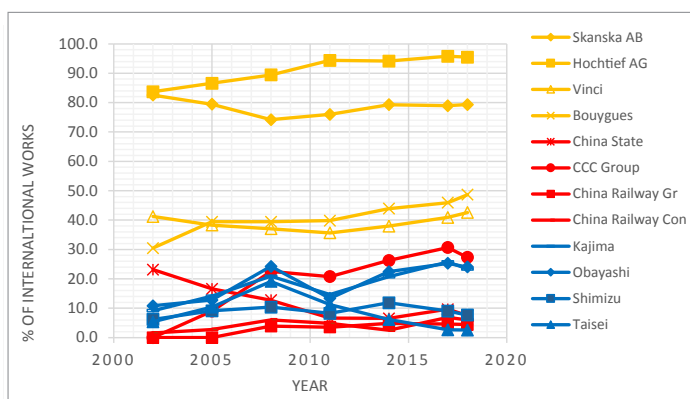


Fig. 5 Percentage of International Project Revenue of Contractors

Voice of Students

Time Machine to Todai: Opportunities beyond the education

Ms. Kavalin Wangsiripaisal

Ph.D. student, Department of Civil Engineering, The University of Tokyo



First Inspiration

I will bring you all to go back to the past by time machine with my story. When I was in the 3rd year grade in Bachelor degree students at SIIT, Sirindhorn International Institute of Technology, Thammasat University. I was picked up as top 5 in my department to have internship in Japan for 3 weeks. Nippon Koei Co.Ltd. provided me exciting civil engineer working experience that become my first inspiration to study master degree in Japan. After I went back to Thailand, after graduated I got Panasonic Scholarship to study at Number 1 University in Japan, The University of Tokyo. I like not only high technology in Japan but also the old wonderful culture at the same time.

Dream comes true

As I wished to come and study Master degree at The University of Tokyo, good time and memorable time are here. During my study, I had to perform the fatigue test which I never do it before in Thailand. Moreover, in Japan also do not have the technician that will be the one who help us perform the experimental as in Thailand. Everything should plan, design, prepare, test, and find the result by our own under supervision of professor. Luckily that under this tuff time, I passed it with the cheering up from my sensei, Matsumoto Takashi, FSO, my senior from Thailand, especially Peerapong, Thiti and Natthakorn, Japanese, and other countries friends in the lab and also same department. Japanese is not a must to use in the academic as civil engineering at Todai try to promote the global environment in the study for students. However, to go into Japanese heart, to remove the language barrier out, we have to try Japanese proficiency test at least about N3. It would be easier to live here happily with daily conversation Japanese level.



Civil Engineer at DOH, JICA project in Motorway route no.9 Rehabilitation, Thailand

Starting Working Life, Gain a little more experience

After I graduated Master degree in Japan. I returned to work in Thailand. My first job is the Japanese company who construct the real estate as the owner and the main contractor. I can use my Japanese experience to work with my Japanese bosses and applied to the work to lift up the standard in construction site as I learnt from Japan. From my point of view, the person who studied in abroad such as Japan will become strong person. In this sense means that we will have critical thinking, good plan, design, do, check, and repeat. That is what we learnt and experience to contribute to our country.

Working as Government Officer, Changing agent

2 years experienced in construction company. I joined the special program which called as PSED, Public Service Executive Development Program. This program is the actual work training with the top leaders in varieties of public sectors. To learn the vision, analytic thinking, planning and action in the short period, 2 years.

Contribute to the country, Civil Engineer

After finished the program, I join The Department of Highways, Ministry of Transport, which is my current work. I am happy to be at this point. Using the knowledge and experience from Todai, to contribute to the society. This is the aim when I wrote down my study plan to Panasonic to apply scholarship. I made my family proud as they raising me with the warm, love and care. Thank you Todai and all teachers and friends to let me have such a good memorable time.

Last trip, Time machine to Todai 2nd time, Ph.D.

As I prayed at the Asakusa Kannon temple before I went back to Thailand, I wish to come back to study Ph.D. if have a good opportunity again. Then about 10 years passed, here I am. My last step is to study Ph.D. to gain the solution to solve the civil work and build the sustainable infrastructure in Thailand. Now I am starting my D2 at Todai. Environment is not change much from last 10 years but the people change. Change to be more active to take care the disruptive technology together with adapting our knowledge experience to contribute to the society.

Message to students, friends

- Be positive thinking, smile with every tuff time you meet, as old English saying: "If there is a will, there is a way"
- Try to contribute your knowledge and experience to the society and make people around you happy, you will become happy

The University of Tokyo, an institution beyond the horizon of research

Mr. Chirayu Kothari

Master's student, Department of Civil Engineering, The University of Tokyo



My name is Chirayu Kothari, and I am a first-year Master's student at Concrete Laboratory, Department of Civil Engineering, The University of Tokyo. I developed an ardent inclination towards academia during my undergraduate studies. Therefore, I decided that enrolling at a graduate program would be my doorway to conduct top-notch research and hone my skills required to pursue academia as a career. While exploring options for my prospective university, I was skeptical about the Japanese Universities due to the language and cultural disparity. However, contacting enrolled students, then, and reading about the experiences of alumni of the university elucidated my apprehension. The fascinating lab culture and exceptional research work at one of the best universities in Japan prompted me to join the International Graduate Program in Civil Engineering at the University of Tokyo, and the JICA scholarship aided to my decision. I do not have a tinge of regret joining the graduate program, and I will always be gratified to be a part of the University of Tokyo.

The department emphasizes more on research than coursework, and hence, everyone gets an edge by starting to work on their thesis from the first semester itself. Though the number of classes offered is limited, there are enough to complete the required number of credits, and we have an option to credit the courses from other departments too. The graduate program here offers all the courses in English. I completed most of my coursework in the first semester and opted for some challenging classes where I got to learn the most. My lab is internationalized, and we have more international students than Japanese students. Lab members are supportive and

help each other by providing their inputs and feedbacks. Frequent meetings and discussions with my professor have kept me on the right track until now. The department proactively collaborates with industrial institutions to develop technologies and solutions which ensure better innovative and commercial products available to society and helps students to gain insights into the industrial world.

Apart from academics, the International Graduate Program offers Japanese Language Class, one of the most worthwhile and exhilarating courses. It made my early days in Japan convenient and provided exposure to Japanese culture and traditions. Moreover, it helped me get acquainted with other International students, and I made a lot of friends enrolling in the class. The Host Family program helps in aiding the students in adjusting to social life outside the campus. Kind and friendly people, including staff, faculties, and other officials, are just icing on the cake. The Foreign Student Office works closely with different student associations to conduct educational and recreational trips every semester. Apart from this, Job fairs are exclusively organized in the department, and it is very beneficial for students seeking a job after graduation.

My experience so far has been fantastic, and the International graduate program in Civil Engineering offers you a lot more than a place to study and conduct research. I would recommend joining this program to the prospective students who aspire to work on cutting edge research and improve their skills in the field of academia or industry.





A wonderful Ph.D. life in U-Tokyo

Mr. Li Yang

Ph.D. student, Deptment of Civil Engineering, The University of Tokyo



Introduction

This article simply introduces the reason for coming to Japan and the choice of U-Tokyo. Then the study and experience here in Japan are also shared from a personal perspective. Some photos previously taken are presented to share my happy memories. Finally, sincere wishes are given for future life.

Keywords: U-Tokyo, Ph.D. research, Japan life

Initially, the reason why I chose to be enrolled in a Ph.D. program at the University of Tokyo was comprehensive. Of course, the most important reason is that it is a very prestigious University in Japan and all around the world, especially for my major Civil Engineering. When I applied for my Ph.D. study, my current supervisor was the first one who replied to me and gave me much confidence to pursue my further study. Besides, I personally love Japan, including its charming sight views like Mt. Fuji, small village Otaru, Kamakura and so on, as well as Japanese animations and TV drama. After I watch the Japanese movie <打ち上げ花火>, I was so touched and always dreaming of attending a firework show on summer nights. Also, I want to visit those places which have been shown in some popular movies like <君の名は>, <天気の子>, which is called '聖地巡礼.' So now, here I am.

It has been half a year since I firstly land in Tokyo. For a doctoral student, my research should come to be No.1. Actually, the research topic is quite different from what I did in my previous research experience and I got a little bit worried about this situation. I spent my first month to do some literature review to gain some fundamental knowledge in the new field. Then after I discussed it with my supervisor for the first time, things became to be clear. My prospective topic contains two main parts: laboratory experiments and numerical simulations. I was asked to follow a senior with his tests. By

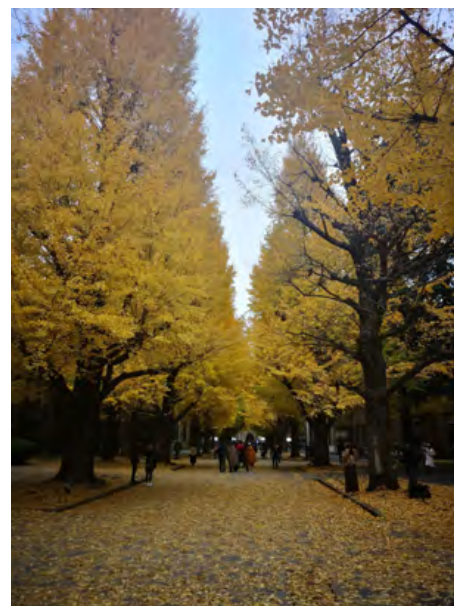
helping him and working with him, I got to know how to conduct my own tests from zero, which was really exciting for me because I learned to do the experiments in a Japanese style, which is rigorous and meticulous recognized by the world. I have also been practicing a lot to be confident enough to conduct my tests from that on.

On the other hand, for numerical analysis, that is what I am good at. However, the simulation method and the numerical theory is totally different, so I had to do simulations step by step. Thanks to my assistant professor in our lab, he spares every effort to help and do together with me. I then have acquired the necessary numerical skills very quickly. I am able to do both experiments and simulations alone, which is a perfect start of my Ph.D. study.

As for life in Japan, I also enjoy it a lot. Although I applied for the English based international program of the Department of Civil Engineering, I am really interested in learning Japanese to know better about Japanese culture and to watch Japanese animations without subtitles. So, I joined the Japanese language class and bought many textbooks to learn by myself. I hope one day soon I can talk freely with Japanese people and make friends with them. Apart from this, I also took part in many activities held by the Department. I got a lovely host family; we have met several times and had dinner together. I also enjoyed the trip to Fuji Mountain and Saitama city. Thanks to the Department and our University, my life here is colorful. I believe I can have an unforgettable Ph.D. career here.



Ginkgo leaves at IIS



Ginkgo leaves at Hongo Campus

At last, I want to share some photos I took. Some were taken on campus while some were from some places around Tokyo. I do love the ginkgo trees and cherry blossoms all around our University, which make our everyday life happy and enjoyable. Apart from this, I visited many famous places in Tokyo. Such as Shibuya, Shinjuku, Kamakura, Mt. Fuji and so on. The views were breathtaking and the foods were delicious. I remember when I first saw the firework show beside the

Tamagawa river in Setagaya, I almost cried out, I felt like my dream had finally come true and I went to the destination of my heart.

I appreciate a lot that my supervisor gave me this opportunity to come to Japan and study at U-Tokyo. It will definitely be the brightest and most memorable time in my life!



Cherry Blossoms at IIS



Rainbow bridge in Odaiba



Light show in Christmas Eve.



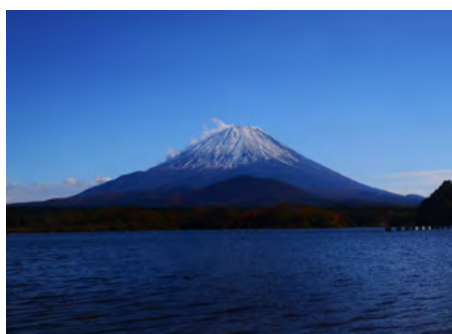
Enoshima



Sunset by the kamagawa



Red leaves in Yoyogi park



Fuji Mountain



Tokyo night show from Roppongi



Sugajinsha shown in the movie 'Your name'

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Department of Civil Engineering
The University of Tokyo

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