

Japan Society of Civil Engineers

International Activities Center

IAC News No.67

Student Voice "A Rich Framework of Studies and Cultural Discovery"

When I look back on four years ago, when I still was an undergraduate student in my home country Burkina Faso in West Africa, I knew only one thing about Japan, which was the quote of Jigoro Kano Sensei written on the wall of our Judo club. It says "It's not the number of fails that count for a warrior, but the number of times he picks himself up no matter how hard he falls." As time goes by, I keep practicing the philosophy of this quote while I am studying at Kyoto University. I have gained an opportunity to be a student of this great university through the JICA scholarship program "African Business Education Initiative for Youth (ABE Initiative). At Kyoto University, I am studying in the department of Civil and Earth Resources Engineering, precisely in the



Christian Sawadogo (Kyoto University)

laboratory of Geomechanics. In this laboratory, under the supervision of Professor KIMURA Makoto, I am studying the interaction between soil and structures under different model of soil.

During wind tidal currents, wave actions in coastal areas, or lateral forces during earthquakes, structures likely undergo high overturning moments. The overturning moments generates uplift forces on the piles located on the opposite edge of the tilted structure. My research topic is a numerical analysis on the mechanical behavior of a type of pile foundation subjected to the uplift loads. In such a dynamic laboratory, there are challenges every day. This laboratory, with Japanese students and students from other seven countries such as Singapore, South Korea, America, Cameroon, Indonesia, Thailand, and Burkina-Faso, is a culturally diverse laboratory, which helps us to learn not only about geotechnical engineering, but also different cultures from each other. We all have our learning ways and philosophies. That is very interesting because we always have the opportunity to know how other people solve the same problem. Also, my seniors are always willing to give me explanations and support about my research. The environment is the one in which you always have a mate with whom you discuss with and get new ideas about any topic. We have laboratory seminars almost twice a month during which each of us reports how much he/she makes progress on his/her researches and also shares what problems he/she is facing with in his/her researches. Besides researches and laboratory works, we do have fun and hang out with each other. It's also a time during which we discover Japan in general and Kyoto particularly. Kyoto is a culturally rich city which has a lot of cultural heritages and places to visit.

I feel very lucky that I could attend the lectures and events organized by JSCE. Those lectures and events are a good framework to learn and to make contact with some experienced practitioners in the various areas of civil engineering. On 24th of November 2017, for example, I attended a site excursion and a Joint Company

Information Session in which I learned a lot. At the construction site, I saw an amazing project. It was my first time to visit an underground structure construction site. It was the construction of Route 9 Kyoto West Utility Tunnel. The contractor was Nishimastu Construction Co., Ltd., and they received us in their office to give some explanations about their construction techniques. The main method was the slurry tunneling method, which has a lot of advantages in terms of finances and time management. Also, we had the Joint Company Information Session with some Japanese construction companies. We discussed many topics with them. One thing that I learned from that session was that most of them, had a unique human resources management strategies; any worker was considered as a part of a family, and the family would train him/her at the work of his/her field. That is the reason why some of those companies have their own institutes in which new employees receive training and conduct researches. I am very grateful to my supervisor and JSCE to give me the opportunity to participate to in those events. I am already looking forward to participating in the forthcoming events of JSCE.



At the Calligraphy Lesson



Learning how to pound Motchi in Nagano

[Reported by Christian Sawadogo (Kyoto University)]

[Alumni of DOBOKU Series]

"Make Japan Quality Great Again?!"

Chan Chee Seng

Osram Opto Semiconductors (Malaysia) Sdn. Bhd.

The goddess of fate has thrown me a curveball when it comes to my career. It never occurred to me that I would have changed 11 companies in 25 years. After completed my Master degree from Tohoku University in '92, my first job was with one of top Oil & Gas Engineering Firm in Yokohama for 5 years. Subsequently I joined a Japanese General Contractor back home in Penang mainly involving in construction of factories for another 6 years. For the next 14 years, my employment had changed from supplier, sub and main contractor, consultants and factory owner's project management team. Presently I am attached to a Germany LED Manufacturing Plant located in Kulim, Malaysia as Project Management Consultant.



Chan Chee Seng Osram Opto Semiconductors (Malaysia) Sdn. Bhd



1992 @ Coastal Engineering Laboratory (Author at right)

As there already have numerous detailed reports from Japanese Research Centres and Consultants in regards to Malaysia current economical and political issues, I would like to share here a few of my personal experiences and opinions on Japanese company issues in Malaysia.

Japanese Company Culture – Has it been compromised?

80's was the era when Malaysia was heading full force for Industrialisation. Both Japanese manufacturers and contractors had been active with the aid of ODA. Unfortunately the situation changed when the Asian Financial Crisis hit in '97. Soon after the crisis, the uprising of mainland China market dominated the investment market and drew all the money to this new "Eastern Frontier".

As a result of the crisis, a company with Japanese staff of more than 50 persons at the peak of construction in 80's had to be downsized to 3 persons or less in order to sustain the office. For some companies, the reduction of Japanese personnel in management resulted the control of company slip into the hand of local staff who, regrettably, abused their power by corruption, conflict of interest, non compliance and etc. Sadly, the good reputation of 'Japan Product' had been jeopardised not only in QUALITY, but also in SAFETY and SERVICE.

The Emerging of China

If you walk around major cities in Malaysia, majority of government projects are constructed by mainland Chinese (hereinafter as Chinese) contractors under the 'One Belt and One Road Initiative' strategy. These contractors are self-financed (or partially supported by the Chinese government) and have been given a lot of special waivers from Malaysia government in related to local regulations and by-laws. The way of Chinese contractors operate is that they import almost 100% of their materials, equipment and labour from home country and thus such kind of practice contributes hardly any benefit to Malaysia local companies and society.

On the other hand, if you ask local engineers who had work for/with Japanese Contractors 2 decades ago, most of them will extend their gratitude to Japanese managers who had devoted their time and effort to train local engineers to improve their skills and knowledge to achieve higher standard, perhaps even close to Japanese standard.

Human Resource

If there is a general opinion that local engineers have become less competent comparing two, three decades ago. The frequent and harebrained change of Education Policy to fulfil certain political agendas had confused school administration and teachers. Apparently the government has more interest to increase the quantity of graduated students and PhD by sacrificing their academic quality. Furthermore 'Brain Drain' issue is haunting the growth of country and continues to be a major issue as the government seems to be keen less to solve it.

That is why Malaysian graduates from overseas are more popular among private sectors especially international companies. Generally Western companies will have more advantages comparing to Japanese as they offer better salary, flexible working hour and more attractive working environment such as working with T-shirt and jean etc. No doubt in Japan, companies are also evolving to create a modern and employee friendly environment but unfortunately this has not yet started here.

Dilemma of Locally Employed Staff in Japanese Company

Statues of direct employment from Japan HQ and from Malaysia branch office are two different stories. Other than the salary, the weight of responsibility and trust invested on by Japanese management has a huge gap. Especially when dealing with Japanese client, as locally employed staff my presence was merely a 'Helper' and decision can only be finalized with HQ staff even though with a lower position. Such kind of practice has nothing but limits the capability of local staff to perform at his best where else Western companies are willing to put more responsibility to local staff.

'Thirst for Opportunity'

During my recent encounter with a Korean contractor, their approach and aggressiveness reminded me of my ex-bosses in Yokohama and also my friend, late Mr. S. Yamamoto who started his career as sales person in trading company in 60's. Mr. Yamamoto by himself alone explored throughout Europe, Middle East and South East Asia markets back in 70's. Both Mr. Yamamoto and my bosses were among those 'Showa Man' who had contributed to the Japanese Economic Miracle era in 50's to 70's. Sadly such kind of 'Showa Man' spirit can hardly be seen in current young Japanese generation. Moreover, especially dealing with Westerner this generation shows lack of confidence and tends to avoid head-on confrontation.

Last but not least, I would like to thank all my Professors, colleagues and friends for their continuous support

and friendship. It has been an unforgettable and wonderful memory to stay in a 'Utopia like' Japanese society. As I am getting closer to retirement, I wish to be able to continue training younger engineers, at least to contribute to maintain a reasonable engineering standard in the near future.

《Column》 Masatomo Nagao, Professor, Ashikaga Institute of Technology



One of the unforgettable memories with Dr. Tan was that the Great East Japan Earthquake occurred when he was doing his internship at National Institute for Environmental Studies, Tsukuba in March 2011. He sent me an e-mail full of realistic presence, saying "Sense, it was very terrible," which made me revealed that he was safe. He joined our laboratory after completing his Master's degree in Zhejiang University in China. In the field of geoenvironmental engineering we are working on, I believe that Zhejiang University is the leading university. One of his great contributions was to create our first step in collaboration between two laboratories of Zhejiang University and Kyoto University.

**Alumni of DOBOKU Series is in collaboration with Editorial Committee of JSCE Magazine.

International Seminar "Roles of Universities and Academic Societies in Infrastructure Engineering in Vietnam and Japan"

In the morning of January 20, 2018 (Sat.), an international seminar was held by Master Program in Infrastructure Engineering (MIE) of Vietnam Japan University (VJU) to discuss roles of universities and academic societies in infrastructure engineering in Vietnam and Japan at My Dinh campus of VJU. This seminar was officially supported by Japan Society of Civil Engineers (JSCE), Vietnam Federation of Civil Engineering Associations (VFCEA), and Vietnam Bridge and Road Association (VIBRA).



Attendants of the seminar

First, Dr. Phan Le Binh (a JICA long-term expert) started the seminar with an introduction about VJU and MIE. Next, Prof. Tetsuro Hyodo (Tokyo University of Marine Science and Technology) made a presentation on international activities of JSCE, followed by a presentation of Assoc. Prof. Nguyen Hoang Giang (National University of Civil Engineering) on the establishment and activities of Hanoi Center of JSCE. Information about structure and roles of VFCEA and VIBRA were explained by Mr. Tran Dinh Thai (Head of International Division, VFCEA) and Assoc. Prof. Tong Tran Tung (Vice President, VIBRA), respectively. Then, as the representatives of private firms, Dr. Duong Trong Vinh (CONINCO) and Dr. Phan Huu Duy Quoc (Shimizu Corp.; Vice President of Vietnam Section, JSCE) summarized expectations from enterprises toward universities and academic societies as well as human resource development in companies. About 60 participants of the seminar composed of researchers/students from universities, members of VFCEA and VIBRA, researchers from research institutes under Vietnam Ministry of Transport and Ministry of Constructions and the employees of Japanese enterprises. Participants including Prof. Nguyen Dinh Duc (Director of MIE, VJU) and Prof. Hironori Kato (Codirector of MIE, VJU) actively discussed various issues such as supports from Japanese companies to their staff for achieving technical certificates, the reflection of their ownership of technical certificates onto staff's salary, and the role of academic society in issuing technical certificates in Japan. In Vietnam, the certification of highest technician level is managed by governmental organizations. Many participants unveiled their expectations that the management of technical certificates should be empowered to academic society even in Vietnam like Japan. Also, many local attendants strongly requested JSCE to share their experiences in Japan more with Vietnamese governmental agencies through international seminars like this seminar.



Presentation by Prof. Tetsuro Hyodo



The participants attentively listen to the seminar



Discussion led by Prof. Hironori Kat



Presentation by VIBRA

[Reported by Phan Le Binh (JICA long-term expert) & Hironori Kato (The University of Tokyo)

Activity Report of ACECC TC16

The Asian Civil Engineering Coordinating Council (ACECC) TC-16 is a technical committee focusing on the theme of "ITS (Intelligent Transport Systems)-based Solutions for Urban Traffic Problems in the Asia-Pacific Region." The TC-16 has been organizing ITS solutions for urban traffic issues, which are a common challenge for Asian countries and include congestion, accidents, and environmental issues caused by rapid urbanization coupled with economic growth and the proliferation of vehicles. It also held a series of discussions on methods of introducing ITS according to a country's level of economic growth and national land development. In fiscal 2016, as an outcome of the TC-16 activities, "ITS Introduction Guide" (Photo 1) was completed and placed on the websites of the ACECC and the Japan Society of Civil Engineers (JSCE).

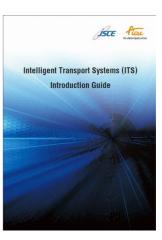


Photo 1. ITS Introduction Guide

The TC-16 has continuously held workshops with committee members from other countries concurrently with international conferences such as the Intelligent Transport Systems Asia-Pacific Forum (ITSAP). In June 2017, a workshop was held in Hong Kong to coincide with the 15th ITSAP Forum (Photo 2). In this workshop, Chairman Kamijo outlined the results of surveys on

Meeting participants of the ACECC TC-16 Workshop in Hong Kong (June 28, 2017)



Photo 2. ITS Introduction Guide

outstanding examples of introducing ITS in Asian countries, including a tricycle leasing system utilizing fintech in the Philippines and its operational management; operation of the Electronic Road Pricing (ERP) system in Singapore; and the operational management of taxis utilizing probe data in Thailand. Also, after discussing proposals to be made at a session at the 8th Civil Engineering Conference in the Asian Region (CECAR 8) to be held in Japan in April 2019, the policy of the session was decided and the written proposal of the TC-16 was prepared. After the proposal had been examined by the secretariat of CECAR 8, the TC-16 received approval to hold a technical session.

Also, "Mobility-as-a-Service (MaaS)," which has been attracting global attention in recent years, is a research theme for this fiscal year, and we have conducted a review of the literature. Additionally, we attended technical sessions and other lectures at the 24th ITS World Congress held in October 2017 and conducted case research. MaaS refers to a system that integrates transportation infrastructure, information and payment services by using information and communication technology (ICT), Internet of Things (IoT) devices and fintech services,

with the aim of providing one-stop, seamless services and proposing means of mobility best suited to the needs of individuals. In Japan, such services have not been realized yet. The ACECC TC-16 will continue to conduct activities toward solving urban transportation problems in Asia by surveying advanced cases of ITS introduction in various countries around the world and revising the ITS Introduction Guide.

[Report by Kazuya Tamada, Secretary of ACECC TC-16, Researcher, ITS Division of National Institute for Land and Infrastructure Management]

Call for CECAR8 Exhibitions

Civil Engineering Conference of Asian Region (CECAR) is an international conference held very three years as one pillar activity of the Asian Civil Engineering Coordinating Council (ACECC) which consists of 13 civil engineering-related institutes and societies. It is a unique meeting in which civil engineering professionals from academia, public and private sectors come together and discuss technical, environmental, social and relating matters beyond the civil engineering discipline. The 8th CECASR (CECAR8) is held in Tokyo from April 16 to 19, 2019, hosted by JSCE.

The CECAR8 holds not only technical sessions, but also over 60 booth exhibits during the conference. Applications for that space is received on a first-come-first-served basis, until August 31, 2018. It will be the great opportunity to introduce the latest technologies, products and research projects of your organizations/institutes to the participants coming from the 13 and more countries which are developing infrastructures rapidly. Please visit the CECAR8 website for more details (http://committees.jsce.or.jp/acecc/cecar). Don't miss this opportunity!

Updates

- ◆2018 JSCE Annual Meeting International Program (Japanese) http://committees.jsce.or.jp/kokusai/
- ◆ The 20th International Summer Symposium in 2018 http://www.jsce-int.org/node/538
- ◆Online Museum of Civil Engineering "DOBOHAKU –Tokyo Infrastructure Anatomy –" (English ver.) http://www.dobohaku.com/tokyo/en/
- ◆The International Infrastructure Archives
 - A Compilation of Japan's Greatest Projects in Transfer of Civil Engineering Technology in Service http://www.jsce.or.jp/e/archive/
- ◆Concrete Committee International Newsletter No. 53 http://www.jsce.or.jp/committee/concrete/e/newsletter/newsletter53/index.html

This special edition is continued from the No.52, to broadly share knowledge on the tremendous R&D efforts being made towards practical application of new and advanced technologies in the field of maintenance, renovation and infrastructure management in Japan. The JSCE Concrete Committee hopes that international readers will find the contents of this special edition Newsletter to be interesting and beneficial for their research

and work.

In the No.53, the translation articles of an outline of each topic regarding technical fields in the SIP Infrastructure Project are available.

CONTENTS:

- Future vision for infrastructure maintenance
- Development of material technologies
- > Use of ICT in infrastructure maintenance
- > Robotics in infrastructure maintenance
- Data assimilation and the infrastructure management cycle
- > International promotion and human resource development
- ◆ Asian Civil Engineering Coordinating Council (ACECC) International Newsletter archives http://www.acecc-world.org/newsletter.html
- ◆IAC "News Pick Up!!" on the JSCE Japanese website
 - http://committees.jsce.or.jp/kokusai/node/118
- ◆Summary of feature articles in JSCE Magazine Vol. 103, No. 5, May 2018 on the JSCE website http://www.jsce-int.org/pub/magazine
- ◆Journal of JSCE

https://www.jstage.jst.go.jp/browse/journalofjsce

◆IAC Students and Alumni Network http://www.jsce-int.org/IAC network

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§ IAC Facebook §

Recent activity of International Activities Center is introduced on this Facebook. By all means, please see this home page. (https://www.facebook.com/JSCE.en)

Comments and Questions

Please send us your feedback and comments to help us improve the IAC news. We look forward to hearing from you.

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