



**Japan Society of Civil Engineers**

*International Activities Center*

## IAC News No.60

### **2017 Annual Meeting, International Program -Prompt Report-**

2017 JSCE Annual Meeting was held at Kyushu University Ito campus on September 11-12. The International Activities Center hosted the International Program: International Roundtable Meeting on “Implementing ICTs within the Construction Industry and Infrastructure Maintenance”, which was planned in response to the idea of Mr. Ohishi, Hisakazu the JSCE President, the 19th International Summer Symposium, the International Workshop for Young Civil Engineers, Networking Reception, and Technical Tour.

At the International Roundtable Meeting (RTM), Prof. Shinichi Akutagawa (Kobe University, Task Force Chair in Sub-Committee of Tunnel Engineering Committee) served as a moderator, and Prof. Kazuyoshi Tateyama (Ritsumeikan University, Chair of Robotics Committee in Construction) delivered a keynote speech. Five Agreement of Cooperation (AOC) societies and one JSCE International Section participated in this year: American Society of Civil Engineers (ASCE), Chinese Institute of Civil and Hydraulic Engineering (CICHE), The Institution of Engineers, Bangladesh (IEB), Korean



The Speakers and the audience had discussions at the RTM

Society of Civil Engineers (KSCE), Nepal Engineers' Association (NEA) and JSCE Turkey Section. After the presentations given by those six organizations, the participants exchanged their knowledge and views freely. About 65 people including the speakers participated in the meeting.

At the 19th International Summer Symposium, a total of 69 young civil engineers, which consisted of 63 international students and 6 participants in the Study Tour Grant program which was hosted by International Scientific Exchange Fund (ISEF) Committee, gave presentations using PowerPoint. There were an audience of over 30 people in each session, and they enjoyed discussions.

The International Workshop for Young Engineers on “Innovative Construction Methods a Case of Cut-and-Cover Tunneling Method,” was organized in cooperation with Dr. Shunsaku Komatsuzaki (Lecturer, the University of Tokyo). 8 facilitators, who were the members of IAC International Student Network Group, and 42 young civil engineers participated in the workshop. The majority of the participants were international students and Japanese engineers and students were not many, but they without hesitation discussed and worked with each other nicely.

In the evening of the first day, annual Networking Reception were held. Approximately 60 people joined the reception including Mr. Ohishi, international guests, the participants of the international summer symposium and the workshop, enjoyed conversation and build friendship in a peaceful and relaxed atmosphere.

On the 2nd day, the Technical Tour visited the Aso Ohashi Bridge reconstruction area and Kumamoto Castle where had been severely damaged by 2016 Kumamoto Earthquake. In the Aso Ohashi Bridge area, international guests were shocked at seeing the fallen bridge, at the same time, showed a strong interest in the up-to-date “unmanned construction technology” which was adopted in the reconstruction work.



Technical Tour participants

## Japanese Civil Engineers the Global Leaders Symposium Series No.10 The Construction of Vietnam's Longest Sea-crossing Bridge “Lach Huyen Port Infrastructure Construction Project (Road & Bridge portion)”

International Activities Center hosted “Japanese Civil Engineers the Global Leaders Symposium Series No.10” at JSCE hall on August 3, 2017, as shown in the program below. The symposium was held under the theme of the construction project (yen-loan project) of the 15.6km-long road and bridge which is to serve as an access road for Lach Huyen Port, which currently is under construction. The purpose of the project is to accommodate increasing freight volumes. At the symposium, those from Japan-based Sumitomo Mitsui Construction Co., Ltd., who have been working at the



The symposium at JSCE HQ auditorium

Lach Huyen construction site, discussed many subjects including their efforts to implement the project, the characteristics of the technologies involved and their struggles to adjust to living in another country away from Japan, an messages to those who wish to work abroad. More than 100 people attended the symposium, 60% of whom were non-JSCE members.

<Japanese Civil Engineers the Global Leaders Symposium Series No.10: The Construction of Vietnam's Longest Sea-crossing Bridge “Lach Huyen Port Infrastructure Construction Project”>

- Opening Speech

Takao Kakei, Director, International Activities Center, JSCE

- Initiatives of Sumitomo Mitsui Construction in Vietnam

Akio Kasuga, Senior Managing Executive Officer; Chief Director of the Technical & Engineering Service Division; Deputy Division Director of the Global Division, Sumitomo Mitsui Construction Co., Ltd.

- Overview of Japan's Official Development Assistance (ODA) for Vietnam

Kazuo Takeuchi, Senior Deputy Director, Southeast Asia and Pacific Department, Japan International Cooperation Agency (JICA)

- General Overview of the Construction Work  
Susumu Yanase, General Manager, Civil Engineering Department, International Division, Sumitomo Mitsui Construction Co., Ltd.
- Screening of a Video Record of the Construction Work
- Talks by Engineers - Civil Engineering Stories of Dads Who Are Working Overseas  
Toshihiro Kurokawa, Takashi Hasegawa, Hiroaki Itahana, Lach Huyen Construction Site, International Division, Sumitomo Mitsui Construction Co., Ltd.
- Qs & As
- Break
- Life in Lach Huyen and Overseas Training for Next Generation Leaders  
Hiroyuki Suzuki, Lach Huyen Construction Site, International Division; Kazuhiro Nishimura, Civil Engineering Designing Department, Civil Engineering Division, Sumitomo Mitsui Co., Ltd.
- Thoughts of a Vietnamese Engineer Who was Once an International Student in Japan  
Nguyen Anh Chi, Lach Huyen Construction Site, International Division, Sumitomo Mitsui Construction, Co., Ltd.
- Sustainable Activities and Issues  
Hitoshi Yamaji, Executive Officer; Deputy Division Director, Global Division
- Qs & As
- Closing Speech  
Yukihiro Tsukada, Executive Director, JSCE

After the opening speech by Mr. Takao Kakei, the Director of the International Activities Center, Dr. Akio Kasuga delivered a talk about trends in the international construction market and the initiatives of Sumitomo Mitsui Construction Co., Ltd. in the international and Vietnamese markets. Mr. Kazuo Takeuchi from Japan International Cooperation Agency (JICA), a supporting organization of the symposium, also gave a talk mainly about the economic climate of Vietnam, and the status of Japan's support for Vietnam, especially in the area of transportation systems including the improvement of urban infrastructure.

Following Mr. Takeuchi's talk, Mr. Susumu Yanase presented a general overview of the construction work with the aid of a video record. Mr. Toshihiro Kurokawa, Mr. Takashi Hasegawa and Mr. Hiroaki Itahana explained the technologies applied at the bridge construction site such as negative friction-reducing steel pipe piles, steel pipe sheet pile foundations, span-by-span bridge construction method and geotubes as well as various ingenious ideas to reduce the construction time. In particular, Mr. Itahana told his own story, which was featured in a TV program called "Sekai De Hataraku Otosan (Dads Who Are Working Overseas)" (TV Tokyo), where he had a surprise reunion with his children on a cross-sea bridge.

After a break, Mr. Hiroyuki Suzuki, who is engaged in administrative works in the project, gave a talk about responsibilities including the preparation of a living environment in Lach Huyen, for many Japanese and workers from developing country, and points to bear in mind when living abroad. Mr. Kazuhiro Nishimura also outlined the overseas internship incorporated in the construction work and training programs for new recruits to give a glimpse of the initiatives of Sumitomo Mitsui Construction for fostering global talents.

In addition, Mr. Nguyen Anh Chi, who studied at the University of Tokyo and is in charge of the engineering work executed at the construction site, delivered a talk in Japanese fluently, about how much he was confused by being sent from Japan to his home country to do an "overseas assignment," the advantages and disadvantages of being an international student, the excellent works done by Japanese workers and workers from developing countries other than Vietnam, and the good progress made in fostering Vietnamese engineers.

Lastly, Mr. Hitoshi Yamaji shared his own experience including the tough times he had when he was involved

in the construction of the Nhat Tan Bridge (Vietnam-Japan Friendship Bridge). In his talk, Mr. Yamaji also pointed out the matters that should be taken into consideration when continuing sustainable activities. Vietnam is going through technological changes including reflecting the Japanese standard of designing steel pipe sheet pile foundations in the Vietnamese design criteria, and the local businesses are growing at a remarkable rate. Mr. Yamaji urged the need of increasing competition in Vietnam, in order to continue activities under such circumstances, by securing ongoing projects, firmly maintaining the capability of procuring equipment, materials and human resources from outside Vietnam, and using local liaisons and highly-skilled contractors while placing importance on quality and safety control that is fully ensured by design construction technologies.

After a lively Q and A session, Mr. Yukihiro Tsukada, the JSCE Executive Director, concluded the symposium by thanking the speakers who delivered the well-prepared talks meeting the theme of symposium and for those who had prepared the widescreen.

【Reported by Yoshiaki Higuchi (Oriental Consultants Co., Ltd.), Leader of Project Group, IAC】

### 【Alumni of DOBOKU Series】

## “The Continued Inspiration from Japan towards Sustainable Transportation Development in Thailand”

**Atit Tippichai**

**Lecturer, Urban and Regional Planning Program, King Mongkut's Institute of Technology Ladkrabang, Thailand**

Since receiving a D.Eng. degree in transportation engineering and socio-technology from Nihon University in 2010, I have been working intensively in sustainable energy and transportation development in Thailand by applying the experiences and technologies learned in Japan. I, being involved as a project manager in developing the first long-term energy efficiency development plan for Thailand and the Thailand's 20-Year Energy Efficiency Plan (EEDP 2011-2030) was endorsed by the cabinet in 2011. Among all economic sectors, the transport sector is the biggest untapped potential of energy saving. Improving fuel economy of vehicles is one of the key measures to realize energy efficiency in the transport sector. There are three main projects, which related to Japan after I graduated.



**Atit Tippichai**

### Idling-Stop Project in Bangkok

The first project is a Feasibility Study of Using the Idling Stop Devices for Vehicles in Bangkok, which was a collaborative project with Japanese companies to install an energy saving equipment namely “Eco-Starter” into Bangkok's buses. This project was a testing project aimed to realize energy saving from traffic congestion in Bangkok. This project was funded by the Energy Policy and Planning Office, Ministry of Energy of Thailand, in October 2010 and successfully completed in September 2011. Three Japanese companies were involved in this project, namely Ecomotion, Climate Consulting, and Almec. Prof. Dr. Atsushi Fukuda of Nihon University my



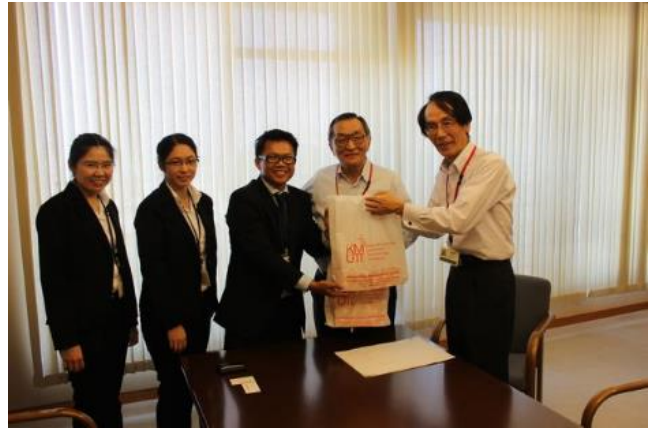
The Idling-Stop Project Report



former professor also was one of the advisors in this project.

### **MRV Study for the Bangkok Port**

The second project is a Feasibility Study on MRV (Measurable, Reportable and Verifiable) Model “Introduction of Electronic Gate to International Trade Port to Improve Port-related Traffic Jam” commissioned by Global Environment Centre Foundation (GEC) through Chuo Fukken Consultants Co., Ltd., in 2012-2013. I was part of the project as a consultant to collect traffic data at the Bangkok Port. The study aimed to improve traffic flow by introducing the electronic gate system and reduce GHG (Greenhouse gas) emissions. I worked with hundreds of students to collect data and conduct questionnaire surveys. In 2013, I together with two assistants were invited to visit and make a presentation at the HQ Office of the Chuo Fukken Consultants Co., Ltd. in Osaka, Japan.



Visit to Chuo Fukken HQ Office in 2013

### **APERC’s Peer Review on Energy Efficiency**

The last project that I would like to mention was the one when I was working as a visiting researcher at the Asia Pacific Energy Research Centre (APERC) in Tokyo. The project was the APEC Follow-up Peer Review on Energy Efficiency in Thailand funded by APEC Energy Working Group (EWG) during May-December 2015. The project aimed to assist Thailand to improve energy efficiency in the transport sector through the peer-review process. A peer-review team was formed with six international experts. Prof. Dr. Atsushi Fukuda also was invited



APERC’s Peer Review Team Visit to Thailand

as a team member. The peer-review team visited Thailand to meet with their counterparts Thai officers during August 3rd – 7th, 2015. 48 recommendations to enhance energy efficiency in the transport sector of Thailand were made to the Thai Government.

In conclusion, I am very proud that I have earned a degree in Japan and have very strong connection with my professor and other Japanese colleagues who have helped me greatly to pursue my dream which is to develop more sustainable transport systems in my country. I again would like to thank them for their kindness and great supports.

Profile: Dr. Atit Tippichai is a lecturer in Urban and Regional Planning Program at the King Mongkut’s Institute of Technology Ladkrabang, Bangkok, Thailand. After graduated, he was a researcher at the Joint Graduate School of Energy and Environment (JGSEE) for 3 years and then he was endorsed by Ministry of Energy, Thailand to work as a visiting researcher at the Asia Pacific Energy Research Centre (APERC) in Tokyo, Japan for 3 years. Dr. Tippichai was also appointed as the Manager for Policy Research and Analytics at the ASEAN Centre for Energy (ACE) in Jakarta, Indonesia in 2016.

《Column》 Atsushi Fukuda, Professor, Nihon University



After studying civil engineering and environmental engineering in Thailand, Dr. Atit Tippichai entered the doctoral course of the Graduate School of Science and Technology, Nihon University and did his research work regarding estimation of marginal abatement cost curves for greenhouse gas in transportation sectors by countries. With co-supervise of Professor Hisayoshi Morisugi who passed away last year, we could have fruitful discussions, and he completed his doctoral dissertation. After he was awarded with a doctoral degree, he returned to Thailand, worked as a researcher at the university for three years and then was sent to the Asia Pacific Energy Research Centre (APERC) as a representative of Thailand for two and a half years. His activity at the center is introduced as it is in his column, and his analytical abilities were highly appreciated. It is very delightful for students who studied in Japan like him to work internationally.

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

## Report on JSCE-MCA Joint Seminar

The Japan Society of Civil Engineers (JSCE) Concrete Committee and the Mongolian Concrete Association (MCA) held a joint seminar on June 9, 2017, in Ulaanbaatar, Mongolia. Organized as part of the MCA Annual International Conference 2017, “Concrete Industry – Current and Future,” the seminar included two lecturers by representatives from Japan on the JSCE Standard Specifications for Concrete Structures and related researches and international activities. Dr. Yoshinobu Oshima (Public Works Research Institute) introduced the Standard Specifications and its history before discussing the quality control of concrete materials and structures, and the role that plays in assuring the long-term performance of road bridges in Japan. Dr. Michael Henry (Hokkaido University)



**Yoshinobu Oshima**  
(Public Works Research Inst.)

then introduced the Standard Specifications for maintenance, and talked about Japanese activities for promoting maintenance management of concrete structures in Asian countries. Both presentations from Japan were simultaneously translated into Mongolian by representatives from the MCA for ease of understanding. Mongolian participants were interested in quality control and rehabilitation as well, and then the practical counteractions in construction against possible deterioration were discussed in the seminar.

Their presentations then were followed by 10 presentations from various Mongolian industry and academic representatives as well as one presenter from Norway, who introduced the usage of admixtures for sprayed concrete. Roughly 100 people were in attendance during the seminar. The seminar attracted the interest of Mongolian engineers, and the representatives from Japan were interviewed by a Mongolian national TV and a radio station about the current situation of Mongolian concrete industry. Quality control interests Mongolian engineers, and this may open up the possibilities of the use the Japanese concrete technology along with JSCE Standard Specification for concrete structures to fabricate “strong, durable and beautiful concrete” in Mongolia.

The representatives from Japan would like to express their gratitude to Dr. Narantuya Batmunkh, Vice Director of the MCA, for her cooperation and support in arranging this joint seminar.



Presentation at the Joint Seminar



Presenters from Japan and Dr. Narantuya with an interpreter

## Updates

- ◆ Summary of feature articles in JSCE Magazine Vol. 102, No. 10, October 2017 is available on the JSCE website.  
<http://www.jsce-int.org/pub/magazine>
- ◆ Journal of JSCE  
 The Journal of JSCE is the collection of research papers which can be viewed on the JSCE website.  
<https://www.jstage.jst.go.jp/browse/journalofjsce>
- ◆ CECAR8 Call for Abstract has started on August 1st.  
<http://www.cec8.jp/>
- ◆ Concrete Committee International Newsletter No. 50  
<http://www.jsce.or.jp/committee/concrete/e/newsletter/newsletter50/index.html>
- ◆ [Previous Announcement] Japanese Civil Engineers the Global Leaders Symposium Series No.11 “the Construction Project of Osman Gazi Bridge in Turkey – one of the world’s longest suspension bridge”(tentative title) will be held on January 24, 2018.  
<http://committees.jsce.or.jp/kokusai/>
- ◆ IAC Students and Alumni Network  
[http://www.jsce-int.org/IAC\\_network](http://www.jsce-int.org/IAC_network)

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### § IAC Facebook §

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### 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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