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International Activities Center

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Development and Resolutions of International Activities

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If we are able to see "globalization" as an aspect of "internationalization," then the international standardization of design codes can be regarded as a typical activity of globalization. A good example of this is developing international standards under the International Organization for Standardization (ISO). The JSCE Special Committee on ISO was established in 1997 and has been playing important roles to meet the trends of internationalization over the past 20 years. In the beginning, committee activities were mainly compiling and distributing information on international standards, but recently have shifted to consider suitable strategies and to act in accordance with them for international standardization.

In March 2016, the Ministry of Land, Infrastructure, Transport, and Tourism released the "Action plan for overseas expansion on infrastructure systems," in which the Ministry's strategies for strengthening overseas extension are described. International standardization of Japanese domestic design standards/codes is one effective effort for disseminating original Japanese technologies and knowhow to the world, and it should be promoted. However, the action plan may not provide us with clear policy about to move ahead. To meet that challenge, an academic society, such as JSCE, should get actively involved in this work, in collaboration with ministerial departments and agencies.

For example, ISO 19338 "Performance requirements of structural concrete," was first edited in 2007, and then revised in 2014. This ISO specifies performance requirements and verification that should be covered for design standards in a country and a region, but does not specify the methods of design. The design of infrastructure is work based on cultural backgrounds. Although Japan is a relatively small country, design standards have been actively developed by relevant organizations. When we can regard design of infrastructure as creative work based on our cultural backgrounds, it may be difficult, or even impossible, to globally unify design standards. However, if we would like to make strategy development for internationalization of our domestic design standards, it is necessary to show the norm describing the basic principles of design work.

It has often been said that globalization can be realized only when we know about ourselves. Knowing our background, such as history, conditions, and culture, can promote the growth of engineers who positively participation in and contribute to society. This can be applied to design standards as well. We hope JSCE's activities will be directed to proper globalization as an aggregation of individuals' global activities.

Report on the 2nd Site Visit Meeting for Students from Overseas

The site visit meeting was held on 21st January 2016 with the objective providing a group of students from overseas studying in Japan with the opportunity to witness some of the most advanced civil engineering technologies, and to provide them with information on civil engineering companies. This was the second such meeting, following on from the first meeting last year, and was attended by overseas students enrolled in universities in the Kansai area. With the cooperation of the Biwako Office, Kinki Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism, 4 sites were visited, and company presentations were provided by 5 companies. The number of students participating was 17.

Sites Visited:

- Gate chamber section (construction: Kajima Corporation)
- Energy dissipator (construction: Obayashi-Tobishima JV)
- Hakko Bridge superstructure (construction: P.S. Mitsubishi Construction Co., Ltd.)
- Intake (construction: Taisei Corporation)

Companies participating in the company presentations:

- Taisei Corporation, Kajima Corporation, Obayashi Corporation, Tobishima Corporation, P.S. Mitsubishi Construction Co., Ltd.

Before the site visits, a description of the Amagase Dam and Redevelopment Project was given, then the participants got an overall view of the dam and redevelopment project from the crown of the Amagase Dam. They were then divided into 2 groups and visited the gate chamber section, the energy dissipator, and the Hakko Bridge superstructure. At the gate chamber, they descended the large cross-section shaft by elevator and viewed the tunnel under construction. The students were surprised by the size of the shaft and the tunnel, and they asked many questions regarding the role of the gate chamber. For the energy dissipator, they viewed the pilot tunnel that is being excavated near the portal. Here also the students were surprised at the size of the tunnel cross-section, although final excavation had not yet started. At Hakko Bridge superstructure, besides technical questions, there were questions regarding design taking the landscape into consideration, and construction using private land. Then the 2 groups recombined, and visited the intake. After receiving an explanation relating to the role of the intake and its construction status, etc., an explanation of the construction machinery that can be used for construction in water was presented, and the students showed a strong interest in the advanced visualization technology.

Overseas students listening to the explanation of the redevelopment project

View of the site visit

In the company descriptions, 10-minute presentations were given by the staff of 5 of the contractors whose work was seen during the visit. Information was provided on the various projects, work, and overseas expansion of each company, which the students listened to with keen interest, and the questions were also very lively.

Like last year's site visit, at this year's site visit, I felt the height of interest of the students in the sites and the

Japanese companies. The intention is to continue to provide opportunities for overseas students to learn about Japanese civil engineering technology and obtain company information by holding site visits, with improvements in the method of holding the events for the groups of overseas students. Finally, many people cooperated in holding this event, so I would like to express thanks to all those involved, in particular, Mr. Inoue and Mr. Tsujino of the Biwako Office.

【Report by: Jun Saito, International Student Network Group, IAC】

Asian Railway Technical Forum at RTRI

Railway Technical Research Institute (RTRI) held Asian Railway Technical Forum on January 21st this year, in 2016, at RTRI, inviting railway operators from Vietnam, Thailand and Taiwan. This forum was organized in order to provide an opportunity to share information and to intensify technical development and research activities of railway-related organizations in Asia. RTRI aims at contributing to the development of railway networks in this region through building cooperative relationships using this opportunity.

Seven guests from overseas participated in this forum including Mr. Dinh Manh Duc, Deputy Director General of the Ministry of Transport of Vietnam, Dr. Chayakorn Piyabunditkul, Senior Analyst of the National Science and Technology Development Agency of Thailand (NSTDA), Mr. Hung-Kang Sung, Chief of Section at the Bureau of High Speed Rail of Taiwan, Mr. James Shi, Assistant Vice President of Taiwan High Speed Rail Corporation, and Mr. San-Chui Chen, Director of Electrical Engineering Department of Taiwan. About 50 Japanese people from railway operators and manufacturers also joined.

The presentations delivered at the forum are as follows:

・"The Overall existing conditions and development strategy of railway system of Vietnam" by Mr. Dinh Manh Duc from Vietnam

・"The Establishment of National Railway Research Institute in Thailand" by Dr. Chayakorn Piyabunditkul from Thailand

・"MMIS(Maintenance Management Information Systems) Use for Rolling Stock Maintenance and Energy Saving" by Mr. Hung-Kang Sung from Taiwan

・"Railway Maintenance Vehicle Positioning and Routing System" by Mr. James Shi from Taiwan

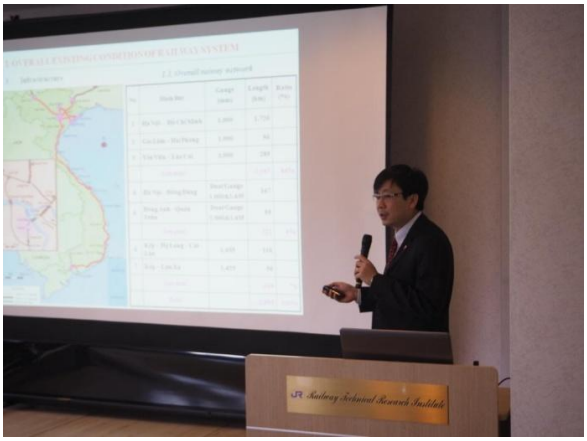
・"Passenger Demand Forecasting for Railway Project Evaluation in Japan" by Dr. Munenori Shibata from RTRI

・"Recent Status of International Standards in Railway Field" by Mr. Hiroshi Tanaka from RTRI

During the Q&A sessions, participants had active discussions and the examples of regarding research and development projects at RTRI were also introduced. This forum provided all the participants a good opportunity where they were able to understand RTRI's specialty areas and technical potentials.

Part of this forum was supported by International Scientific Exchange Fund (ISEF) of JSCE.

Situation of the forum



Mr. Dinh Manh Duc of the Vietnam Ministry of Transport

Mr. Chayakorn Piyabunditku of NSTDA

【Report by: Toru Miyauchi, General Manager, International Development, RTRI】

What's Happening

●2016/5/16・・・IAC Symposium-Japanese Civil Engineers playing an active part in the world-Series No.7 on "Status quo and future of Rapid transit in India Project" at the JSCE HQ, Tokyo
http://committees.jsce.or.jp/kokusai/node/104 (Japanese Only)

Updates

◆The summary of feature articles in the JSCE Magazine 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

◆Disaster Fact Sheet
http://committees.jsce.or.jp/disaster/

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

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