



# Japan Society of Civil Engineers International Activities Committee Newsletter

No. 28, January 2008

## June 2008- May 2009

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## Let's expand our friendship as global civil engineers!



*HORIKOSHI Kenichi, Ph.D.*

*Chair of Information Subcommittee, JSCE*

*Secretary of International Activities Committee, JSCE*

*Chair of JSCE Committee on ACECC*

*Civil Engineering Research Institute, Taisei Corporation*

It's my great pleasure to have an opportunity to introduce our activities as Chair of JSCE Information Subcommittee under the International Activities Committee, as well as Chair of JSCE Committee on ACECC.

As we have noticed, the fields of civil engineers activities have been dramatically broadened and varied. This is based on the change of our lives becoming more and more diverse. Now civil engineers are strongly requested to have an ability to gather and coordinate interdisciplinary professional ideas and information without boundaries of engineering fields and nations. In such a situation, global information has become an essential source for our activities in order to foster global visions, to promote international cooperation, to develop technologies, to protect valuable environment, and of course, to create sustainable societies.

If we look into the construction market, a number of international projects are currently under way. As the Japanese domestic construction market is shrinking, many of our colleagues have no choice but to work overseas. In some developing countries, accessible sources of information are too limited for them to be competitive, and engineers recognize the importance of having strong human and information networks. How we extract the necessary and timely information is the key to the success of our engineering activities.

Although many years have passed since the necessity for us to become internationalized was recognized in Japan, I think Japanese civil engineers still need to make continuous efforts to become more international. A huge number of resources for our technologies, such as design codes, manuals and reports are still written only in Japanese..

*(continue page 2)*

Although many excellent workshops and symposiums are held in Japan, as most of them are conducted only in Japanese, the valuable information is limited to domestic engineers. Overseas engineers have no opportunity to access such information, which can reduce the size of the market and the competitiveness of our technologies.

It should also be added that, historically, we are very much used to dividing our activities into two categories, i.e., 'domestic' and 'international'. Now it is the time to think that 'domestic' is only a part of 'international'. That means any domestic activity is only part of international activities, and should be opened to global demand.

Based on the above background, the JSCE International Activity Committee has decided to organize the Information Sub-committee, which shall accelerate borderless information exchange.

Currently, the Sub-committee publishes two types of web-based information, i.e., *Newsletter*, and *Civil Engineering*. The latest publication is posted on <http://www.jsce-int.org/>.

As you have already noticed, the frequency of *Newsletter*'s publication has been increased to every two months. The *Newsletter* deals with the following timely articles.

- 1) Opinions and greetings from the JSCE delegates,
- 2) Introduction of civil engineering projects,
- 3) Information on recent disasters,
- 4) Letters from overseas students,
- 5) Introduction of JSCE activities,
- 6) Other news and information.

The web-based information *Civil Engineering* provides more detailed technical information, most of which is extracted from domestic JSCE magazines. The articles considered to be useful to overseas engineers are chosen from the domestic magazines. Our Sub-committee is always ready to accept contributed articles from any of your societies/institutions and countries. Any opinion or comment is also very welcome to improve our activities. Let's expand our friendship as global civil engineers!

## The 34<sup>th</sup> KSCE Conference & Civil Expo 2008



International Roundtable Meeting participants, Oct 30, 2008

The 34<sup>th</sup> KSCE Conference & Civil Expo 2008 was held on October 29 and 30 in Daejeon, Korea. A JSCE delegation consisted of Dr. Kayahara, the president, Prof. Kusakabe a vice president and the chair of the International Activities Committee, Dr. Ishii the immediate-past president and I participated in that event.

In the opening ceremony, Dr. Kayahara delivered a keynote speech titled "Who constructed it?", followed by the "From Imitation to Generation" by Dr. J. H. Chung of Gwangju Institute of Science and Technology.

Dr. Kayahara discussed the issue pertaining to the invisibility of civil engineers in society. His discussion interested the audience and gained their support, who was aware of the issue underlying in the Korean civil engineering community. Dr. Chung next talked about the necessity of increasing research investment, referring to the positive relationship between R&D and increased research funding as a proportion of GNP in the past R&D in Korea.

After a lunch break, International Roundtable Meeting themed on "Civil Engineering- The Technology of Fusion and Creation" convened and Prof. Ha-Son Wong of Yonsei University, Chair of International Affairs Committee of KSCE chaired. Delegates from Mongolia, Taiwan, UK and Japan attended the meeting and exchanged views and opinions with each other.

Prof. Kusakabe discussed the necessity of cross-disciplinary researches and multi-technology fusion with an example of collaboration between geotechnical engineering and biology, pointing out the negative effects of narrowly defined knowledge and research areas. He also proposed that the above topic should be considered in the Asian Civil Engineering Coordinating Council (ACECC), which was

approved there. Responding his discussion, the participants talked about the importance of improving people's understanding and support and that of engineers' recognition of on-site problem-solving responsibility in order to realize cross-disciplinary collaborations. Because they had been acquainted with each other for a while, the participants seemed become more comfortable in having discussions and exploring further every time they met.

Next, Roundtable Meeting for International Students was held, and fifteen international students studying in Korea participated in the meeting. Currently around one hundred and thirty students were reportedly enrolled in civil engineering courses in higher education institutions in the host country. For those students, cultural and language differences were major challenges as for international students in Japan.

At the end of the International Program, a banquet was offered on Thursday evening, and for the JSCE delegation Dr. Ishii attended it, who also did the roundtable meeting for international students. The JSCE male choir Civil Harmony gave an excellent performance. International delegates and guests enjoyed the music as well as each other's company.

*by FURUKI Moriyasu  
(Executive Director, JSCE)*

## **Student Network -Voice from the Students-**

### **Transportation Infrastructure Systems: Experience Learned from Japan**



Name: Atit Tippichai  
Country: Thailand  
School: Nihon University

There are many things regarding to transportation infrastructure systems in Japan which are my impressions since I have been studying here more than two years. Therefore, I would like to take this opportunity to share

*Also available on web: <http://www.jsce-int.org/>*

some impressive stories. Due to my campus locates in Funabashi, Chiba Prefecture where is in the Greater Tokyo Area, the world's most populous metropolitan area, I have many chances to see how the world's biggest railway network works well and realized that how millions of workers move from suburban to the central of Tokyo in the morning. Surprisingly, I had experienced to see a salary man takes the same train, sits on the same seat and gets off at the same station at the same time every day. It means that I also had surprised myself as well that how I had made a routine travel exactly. One of the reasons would be the certainty of the train's time tables that travelers can plan exactly when and how they can arrive at a destination on time. It also would be the most important reason that most of travelers decide to go by train rather than passenger car.

As I am also a member of the Kanto Branch JSCE's Student Chapter, I have joined several technical visits to see advanced technologies at the constructing sites, for example, two huge interchanges; the Ohashi Junction in Shibuya, Tokyo and the Daishi Junction in Kawasaki, Kanagawa Prefecture; and a new runway, called D, built on the sea at the Haneda airport. Due to land availability limitation and environmental problem issues in Tokyo Metropolitan Area, the highly advanced technologies of construction are needed to fulfill travel demand and meet the constraints. Even such technologies would be high cost however it would be benefits in long term to serve traffic flows also. Importantly, it is necessary to planning transportation systems as a whole and let each key connection point in the network works well with each other.

Moreover, transportation facility in Japan is very friendly to older and handicapped persons. As one of society members, they are able to go out to do their activities during day time themselves by using public transport systems that is one of the major transportation system management principles – the equity. Recently, I had a chance to visit Hakone, Kanagawa Prefecture. I found that transport infrastructure systems for recreation in Japan are excellent as well. It was very convenient and exciting due to various transport modes provided.

When I have seen good transportation systems in Japan, I always compare to Thailand and think back how to apply such systems to my home country. As transportation infrastructure systems in our country are under progress, it is necessary to learn from good practices in developed countries like Japan and adapt to Thailand's conditions.

## Project Report 5 Steel Bridges Construction for Uzbekistan Railway

This project is a part of “Tashguzar-Kumkurgan New Railway Project”, which has the 220km length over two provinces, Kashkadarya and Surkhandarya in south-east area of Republic of Uzbekistan.

The purpose of this new railway construction is to solve inconvenience due to the existing railway going through the territory of Turkmenistan since current railway was constructed in the Soviet Union age. JBIC (Japan Bank for International Cooperation) lends 16.4 billion Yen of the fund for 4 contracts of this project. These 4 contracts consist of 5 steel bridges construction, signal communication system and the supply of the rail materials.

This project was requested by State Joint Stock Railway Company “Uzbekistan Temir Yo’llari”, designed by “Japan Transportation Consultants” and awarded to Japanese consortium, which consists of 3 Japanese contractors, Shimizu, Nippon Steel Engineering and Yokogawa Construction. The Construction period is 25 months from March 2007.

Each bridge has 173 m to 295m of the bridge length and 10m to 36m of pier height. The type of main superstructure is 3 span continuous truss bridge and the type of side span is steel deck girder. Substructure is constructed by reinforced concrete except No.4 bridge with steel truss piers. Foundation is spread foundation due to sand stone or hard Argillite layer. The Member of superstructure are made in Japan and Philippine and transported by Russian railway from Nokhodka to Uzbekistan after marine transportation.

Current progress, No.2 bridge has been almost completed, the erection work of superstructure for No.1 and 3 are going on and the substructure works for No.4 and 5 is under construction.

Regarding the weather of this area, temperature of summer time in sunny place become generally near 50 degree centigrade and last winter time became less than minus 20 degree, which is due to cold wave since 80 years ago. Therefore casting concrete in those seasons needed to pay closest attention. Since erection works of the superstructure reach first winter season from now on, especially painting and high tension bolting works should be done under strict control.

Around the middle of next year, train passing over 5 bridges, which is the symbol for the friendship between Japan and Uzbekistan will be able to be seen.

*By Tetsuo Oishi (Shimizu Corporation)*



**Picture 1. Site location**



**Picture 2. No.2 Bridge**



**Picture 3. No.3 Bridge**

## Information

### Event Calendar

#### JSCE 2009 General Assembly

Date: May 29, 2009

Place: Hotel Metropolitan Edmont, Tokyo, Japan

#### JSCE 2009 Annual Meeting & 64th Annual Conference

Date: September 2-4, 2009

Place: Fukuoka University, Fukuoka, Japan

#### International Program

Day 1: Sep. 2, 2009

- 1) Roundtable Meeting

Day 2: Sep. 3, 2009

- 2) WFEO-JFES-JSCE Symposium
- 3) International Session

### Conferences

#### March 2009

##### 12-14 5th International Symposium on STEEL STRUCTURES (ISSS '09)

Venue: Hotel Prima, Seoul, Korea

URL: <http://www.kssc.or.kr/ISSS'09/>

##### 15-19 International Foundation Congress & Equipment Expo '09 (IFCEE09)

Venue: Buena Vista Palace Hotel & Spa, Lake Buena Vista, Florida, USA

URL: <http://www.ifcee09.org/>

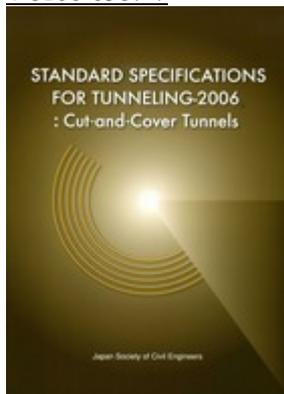
### Publications

#### From Sept. to Jan. 2009

##### STANDARD SPECIFICATIONS FOR TUNNELING - 2006: Cut-and-Cover Tunnels

November 2008, Pages 348

July 2008, Pages 348, Price: JPY4,200, ISBN 978-4-8106-0587-7



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### Call for Paper

#### The 11th International Summer Symposium, JSCE

Date: September 11, 2009

Place: Tokyo Institute of Technology, Tokyo, Japan

Important Dates:

-Paper Submission: June 1, 2009

-Notification of Acceptance to Authors:

Early July, 2009

-Submission Modified Paper:

Early August, 2009

\*For more detail will be announced at website:

URL: <http://www.jsce-int.org/iss.shtml>

#### JSCE 2009 Annual Meeting & 64th Annual Conference International Session

Place: Fukuoka University, Fukuoka, Japan

Date: September 2-4, 2009

Important Dates

-Paper Submission: April 10, 2009

\*More detail will be announced at website:

URL: <http://www.jsce.or.jp/committee/zenkoku/h21/index.html>

#### The 11th International Conference on Asphalt Pavements (ISAP NAGOYA 2010)

Date: August 1 -6, 2010

Place: Nagoya Congress Center, Nagoya, Japan

Important Dates:

Submission of Abstracts May 31, 2009

Notification of Authors July 31, 2009

Submission of Draft Papers December 10, 2009

Acceptance of Draft Papers February 28, 2010

Acceptance of Final Papers May 31, 2010

URL: <http://www.isap-nagoya2010.jp/index.html>

#### ICEC 2009 (Sendai)

Date: September 14-16, 2009

Place: Tohoku Univ., Sendai, Miyagi, Japan

Important Date:

Abstract Submission: February 28, 2009

URL: <http://donko.civil.tohoku.ac.jp/icec2009/>

#### Joint IABSE-fib Conference

Date: May 3-5, 2010

Place: Cavtat, Dubrovnik-Neretva County, Croatia

Important Date:

Abstract Submission: February 28, 2009

URL: <http://www.iabse.ethz.ch/conferences/Dubrovnik2010/>

Send your comments and suggestions to:  
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