

## IAC News No. 23

### **Black Ships for the Japanese Construction Industry**

My colleagues in Japanese construction companies are worried about the future of their industry. Since domestic investment in public infrastructure is decreasing, Japanese construction companies are expected to move to emerging markets where the demand for infrastructure development is high. However, despite their world-class technology, Japanese contractors tend to experience difficulties in projects that are open to international competition.



**The University of Tokyo**  
**Petr Matous**

The difficulties faced by Japanese construction companies in international markets are related to the uniqueness of the Japanese domestic market. Only 160 years have passed since Japan was forced to open up to international trade by the American “black ships”. Because of their limited prior exposure to international exchanges, Japanese officials could communicate with American counterparts only by first translating Japanese in to Chinese or Dutch, and then to English. While most of the society has changed dramatically since then, the Japanese construction market appears still to be isolated by international standards.

Human resource management is one example in which Japanese construction companies seem to be lagging behind. Although the volume of construction projects has decreased significantly from the days of rapid economic growth, construction companies report shortages of young highly-educated engineers entering their ranks. Incidentally, this year, there may be no Japanese student from the Department of Civil Engineering at the University of Tokyo interested in joining the construction industry. On the other hand, every year dozens of top-class engineers from Asia and other continents graduate from this department but most are unable to find jobs with the Japanese industry and leave to other countries.

I believe that the lack of international players in the domestic construction sector is related to the lack of success of overseas. Naturally, it is difficult to enter other markets for employees raised under de facto closed market conditions with little experience of direct cooperation and competition with individuals and organizations from different backgrounds. Internationally-successful companies, such as Hochtief or Skanska, compete in their domestic markets with similar firms under similar systems as they would in the Middle-East or Eastern Europe. It goes without saying that their employees who successfully obtain and manage projects under fierce competition at home and around the world are not necessarily German or Swedish-born.

Opening your home is essential for succeeding outside of your home. Such change may lead to disruptions and frictions, which may be unwelcome by the established stakeholders who are accustomed to the shrinking but stable status quo in the Japanese construction market. However, without reforms that demonstrate that the Japanese construction industry has a future beyond the Olympics, young Japanese graduates will prefer to join other sectors, such as finance or management consulting, which are popular despite the fierce international competition in such industries.

Japanese contractors must accept foreign talent to become major international players. Unlike black ships, which forced changes on Japan from the outside, the International Activities Center of JSCE is a self-help response of the Japanese civil engineering community to the pressing situation. I believe the International Center is in a great position to help Japanese contractors open their doors to international engineers and thus make great contributions to global civil engineering and the Japanese industry from within.

## Report on IAC Japanese Civil Engineers the Global Leaders Symposium Series No. 2

IAC held the Japanese Civil Engineers the Global Leaders Symposium Series No.2: Hoover Dam Bypass Project – Colorado River Bridge at the JSCE HQ on Aug 5th, 2014.

The IAC, seeing that the large-scale construction projects undertaken overseas by Japanese construction companies are well-received widely, has been holding the Global Leaders Symposium Series which introduces the latest Japanese civil engineering technology and the professionals who explore their opportunities abroad and develop their career paths, and supports young engineers to develop their perspectives of civil engineering profession and of its significance in society.

That Symposium Series No.2 was opened by Dr. Yoshihisa Kawahara a JSCE Vice President with his remarks, followed by the keynote speech of Prof. Junichiro Niwa of the Graduate School of Tokyo Institute of Technology, who has received the 8th annual Merit Awards for Industry-Academia-Government Collaboration for his significant achievements in the Hoover Dam Bypass Project – Colorado River Bridge construction. Then, Mr. Dave Zanetell the former project manager of Federal Highway Administration (FHWA) that was the client of that bridge construction delivered a message by video.

In the latter half of the symposium, Mr. Katsuji Fukumoto, Mr. Michiya Sadamatsu, and Mr. Yuhei Takatoku of Obayashi Corp. who engaged in that construction discussed the summary of their works with interesting background stories. They also talked the difficulties, efforts and accomplishments that they experienced in their works, and gave advice and encouragement to young engineers who would be pursuing their professional career in the civil engineering field.

Over 120 people attended the symposium and in the Q &A session, made comments and questions to those speakers. It was a successful meeting.



Prof. Niwa delivers a presentation.



The video letter from Mr. Dave Zanetell

The IAC will continue to hold the Global Leaders Symposium Series, focusing on overseas projects. The Series No. 3 will introduce LOT1-1 Water Transfer Tunnel and Related Works by Shimizu Corp. Please check the JSCE website for details.

【Written by International Activities Center】

## Message from JSCE Taiwan Section

JSCE Taiwan Section was established as the first international section of JSCE in April 2000. Prof. Jenn-Chuan Chern, Mr. Chi-Shou Hsieh, Dr. Lie-Liung Chou, Mr. Yih-Lieh Shih, Prof. Der-Her Lee, and Prof. Jing-Wen Chen are the 1st to incumbent Section President respectively. Assist. Prof. Kai-Lin Hsu the 1st Secretary General and Assist. Prof. Wu-Te Ko the 2nd and current Secretary General have worked with those presidents. The Taiwan Section is proud that they have never missed the International Section Meeting which is held usually during JSCE Annual Meeting.

Taiwan Section members come from various backgrounds such as the local civil engineering professionals and researchers who have studied in Japan, the Japanese civil engineers who have engaged in projects in Taiwan, the Ministers, Deputy-Ministers and administrators of public works in the Taiwan Government. The number of Section members peaked from 2000 to 2008 when several big projects were implemented, which exceeded 40, and after that gradually has declined to 20 something recently.

The Section, focusing on building communication and cooperation between the Taiwanese and Japanese civil engineering industries, has offered various assistances and conducted a wide range of activities. Making travel arrangements for JSCE delegations and research teams, giving them local knowledge, information and a tour, and introducing latest Japanese civil engineering technologies in various forms in Taiwan are some examples. Moreover, the Section gathers data analyzes information about current Taiwanese civil engineering technologies, the Japanese civil engineers' contributions to the development of infrastructure in Taiwan in the prewar days, the construction projects undertaken by Japanese construction companies in Taiwan, write reports on those for the monthly JSCE Magazines and other journals, and furthermore translates them into local languages.

Last, the Taiwan Section holds joint symposium with Japanese counterparts on a regular basis and builds good communication and friendship with the Korea Section. It is very interested in having communication with the other International Sections, and organizing joint activities with them in a near future.



**Taiwan-Japan Joint Symposium on  
Disaster Mitigation of  
Cultural Heritage and Historical Cities in  
Tainan, Sept 3-4, 2008,**



**Japan-Korea-Taiwan Joint Seminar in  
Kuamoto, Aug 24-25, 2012**

**【Assist. Prof. Wu-Te Ko Taiwan Section Secretary General, Cheng Shiu University】**

## What's Happening

- 2014/9/10 . . . . The 16th International Summer Symposium in 2014 (Osaka University, Osaka)  
<http://www.jsce-int.org/ISS2014>
- 2014/9/10 . . . . 2014 JSCE Annual Meeting Discussion Session on “What We Have Learned in Japan: Messages from the leading civil engineers who have studied in Japan” (Osaka University, Osaka)  
※A talk with the speakers “Messages from our seniors and messages to our juniors” will be held within the discussion session.  
<http://www.jsce-int.org/node/287>
- 2014/9/10~13 . . . . 2014 International Workshop for Young Civil Engineers (Osaka University, Osaka)  
<http://www.jsce-int.org/node/249>
- 2014/9/13 . . . The 8th JFES-JSCE-AIJ-WFEO Joint International Symposium on Disaster Risk Management (Kobe University, Kobe) <http://www.jsce-int.org/node/279>
- 2014/10/7~11 . . . . ASCE Global Engineering Conference 2014 (Panama City, Panama)  
<http://content.asce.org/conferences/annual2014/>
- 2014/10/22~24 . . . . KSCCE Annual Meeting 2014 (Daegu-Gwangyeoksi, Korea)

## Updates

- The summary of feature articles in the JSCE Magazine is available on the JSCE website.  
<http://www.jsce-int.org/pub/magazine>
- Concrete Committee International Newsletter No. 38  
<http://www.jsce.or.jp/committee/concrete/e/newsletter/Newsletter.htm>
- 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>
- JSCE 100<sup>th</sup> Anniversary Postal Stamp will be released in September, 2014.  
<http://jsce100.com/node/250> (Japanese Only)

## IAC News Subscription

The IAC News is one of the communication tools to share information and ideas with the members. We would like to invite you, your friends and colleagues to join the communication and to subscribe the IAC News. Please register online: (<http://www.jsce-int.org/node/150>). We look forward to meeting you.

## Editor's postscript

How about summer vacation in this year? We faced the fury of the nature such as landslide disaster caused by heavy rains on this summer.

We appreciate that Dr. Petr Matous wrote about internationalization of Japanese Construction Industries for this issue on such a short notice. I felt that employing foreign engineers in Japanese companies is very important as well as exporting the Japanese knowledge and engineers of civil engineering. (S.K)

## 【Comments and Questions】

Please send us your feedback and comments to help us improve the IAC news. We look forward to hearing from you. JSCE IAC: [iac-news@jsce.or.jp](mailto:iac-news@jsce.or.jp)