



Japan Society of Civil Engineers  
International Activities Center



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## Pursuing globalization through the JSCE's International Scientific Exchange Fund

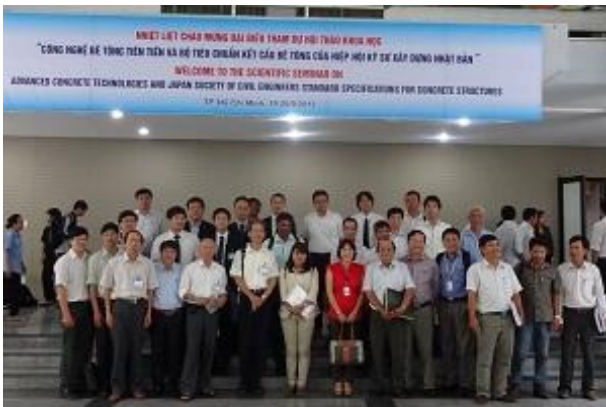
The globalization of people, goods, information, and money is accelerating as a result of remarkable advances in information communications technology and transportation. While the world market for industrial products is expanding, Japanese products have been losing global share. In the civil engineering field also, there are concerns that the global presence of Japanese companies is declining. To counter these trends, Japan's entire civil engineering sector must strive to further internationalize by disseminating information in English, curbing the downward trend in the number of civil engineering graduates to seek employment outside the civil engineering field, and improving the ability of Japanese engineers to adapt to different cultures.

Established as commemorative project for the JSCE's 75th anniversary, the JSCE International Scientific Exchange Fund was set up to promote civil engineering and civil engineering technologies. From the onset, the fund has operated as an independent charitable trust. Between 1990 and 2014, about ¥160 million was provided to promote JSCE's international activities, such as international conferences hosted by the JSCE, visits to Japan by people from partner societies overseas, and

academic exchanges of Japanese and foreign civil engineers.

To further promote rapid globalization, the fund committee is looking beyond simply hosting projects in other countries. The committee is considering funding mainly the projects which help civil engineers to network and build collaboration with each other across borders and promote JSCE's international sections to be recognized as a contact point between Japanese and local civil engineers. Such projects provide opportunities for young students and engineers overseas to learn about Japan's cutting-edge civil engineering technologies and activities.

Three years have now passed since the International Activities Center was established. By regularly reviewing the relationship between the JSCE's international strategies and the fund, we will ensure that the fund-subsidized projects are effective. We also will work more closely with civil engineers in foreign countries and with the Japanese staff for the subsidized projects. The fund committee looks forward to hearing your opinions and suggestions concerning the fund.



Fund-hosted joint seminar with overseas societies



Fund-subsidized site tour

## FY 2014 JSCE Joint Workshop “The 1st Vietnam-Japan International Workshop for Sustainable Ocean Tourism Development and Disaster-Environmental Risk Management”

Vietnam is a long and narrow country with the shape of an “S” located on the eastern of the Indochinese peninsula, bordering the Gulf of Tonkin, the East Sea and the Gulf of Thailand. The coastline is very long with about 3,260 kilometers stretch, therefore the coastal zone plays the leading role in Vietnamese economics. Besides traditional industries, Vietnamese government also emphasizes the developments for ocean tourism to accommodate a large number of both domestic and international tourists. Given strong economy and a wealth of tourism resources, it is expected that such developments will attract more tourists from all over the world and further contribute in boosting the economy of Vietnam.

On the other hand, investments for tourism often bring about conflicts with many other issues such as disaster risk problems or environmental problems. For instance, a massive sand extraction for tourism developments near the coasts may cause severe coastal erosion in downstream coastal communities, and which will result in the loss of many houses due to strong waves. Tourism developments will also create densely populated coastal cities which should be vulnerable to coastal disasters such as storm surges due to typhoons or tsunamis due to earthquakes. Ocean tourism developments need to be harmonized with “Disaster Risk and Environmental Management” to minimize coastal disaster risks and environmental impacts.

JSCE Ocean Development Committee in collaboration with Khanh Hoa Province and Ho Chi Minh City University of Technology organized the international workshop “The 1st Vietnam-Japan International Workshop for Sustainable Ocean Tourism Development and Disaster-Environmental Risk Management” at Nha Trang in Vietnam in order to discuss these challenges, supported financially by the JSCE International Scientific Exchange Fund. The present workshop aimed at providing an occasion for many people concerned to discuss how such sustainable ocean development is important in order to achieve the long-term continuation of tourism business in collaboration with local coastal communities. The workshop was composed of several presentations made by Vietnamese and Japanese researchers/engineers separated in the three sessions.

Because the workshop was held for the first time in this region, dealing with the subjects such as coastal disaster, environment, and climate change issues, more than 100 public administrators attended the workshop. Many of them expressed their interest on the various information provided by the presenters as they have also witnessed a number of environmental issues caused by rapid economic development

and recent major coastal disasters in the neighboring countries. The seminar was also broadcasted by a national television on the evening of that day, showing the glowing interest on the environmental issues among Vietnamese people.



Group photo of the organizing committee

Japan has been contributing to economic development through the ODA infrastructure projects such as port and airport in the last few decades. Although it could be too small to compare to these mega projects, we expect that the present workshop can become a small step but important first step in initiating further collaborations between two countries to achieve the sustainable ocean tourism development in consideration of sound disaster-environmental management.

【Hiroshi Takagi (Tokyo Institute of Technology), Chairman of the Int'l Affairs Subcommittee, Ocean Development Committee, JSCE】

### 【JSCE Workshop Program】

Yasaka Hotel, Nha Trang City, Vietnam, January 13, 2015

#### ■ 13:00-13:15 Opening Remarks

- Dr. Tran Thien Phuc, Vice Rector of Ho Chi Minh City University of Technology
- Mr. Le Mong Diep, Director of Department of Natural Resources and Environment, Khanh Hoa

#### ■ 13:15-15:45 Lecture session on “Disasters, Climate Change, and Environmental Issues in Vietnam”

- Dr. Nguyen Danh Thao, Ho Chi Minh City University of Technology  
“Coastal disasters and sustainable development in Vietnam”
- Dr. Hiroshi Takagi, Tokyo Institute of Technology  
“Sound coastal management for sustainable tourism development in Nha Trang”
- Dr. Esteban Miguel, The University of Tokyo  
“Disaster Awareness and Preparedness along the Central Vietnamese Coastline”

- Dr. Nguyen Trung Viet, Rector of Central Region College of Technology Economics and Water Resources  
“Beach morphological changes, case study in Nha Trang and Hoi An, Vietnam”
- Dr. Vu Thanh Ca, Director of Research Institute for the Management of Seas and Islands  
“Research for legalizing marine environmental protection in the Law of Sea and Island Natural Resources and Environment of Vietnam”
- Mr. Le Mong Diep, Director of Department of Natural Resources and Environment, Khanh Hoa  
“The challenges of climate change on the plan of sustainable development in Khanh Hoa Province”

■ 15:45 – 16:00 Coffee Break

■ 16:00 – 17:00 Japanese latest technologies  
Introduction on “Soft Technologies Contributing to Sustainable Ocean Development”

- Mr. Taketo Araki, Yachiyo Engineering  
“The mechanism of storm surge and tsunami – these prediction technics and cases of countermeasures in Japan”
- Mr. Jun Iwamoto, Yachiyo Engineering  
“Blue carbon and Coastal Ecosystem-based Disaster-Environmental Risk Management”

■ 17:00 – 17:45 Panel Discussion

■ 17:45 Closing Remarks

Dr. Tran Thien Phuc, Vice Rector of Ho Chi Minh City University of Technology

## A Message from JSCE Taiwan Section “Japanese Civil Engineers have left profound traces on the history of Taiwan”

There were many public works projects implemented under the leadership of Japanese civil engineers during the Japan colonial period. Some of the structures which were built during that period have been still in use, or nicely restored. JSCE launched a civil engineering history and heritage program in order to promote the restoration of civil engineering historical structures. Prof. Der-Her Lee, JSCE’s Taiwan Section President in those days requested Assist. Prof. Wu-Te Ko the Secretary General of that section to study and collect data on civil engineering historical structures and projects. The data collected as follows:

Wusanto Dam (completed in 1930), located in Guantian Dist., Tainan City, was designated JSCE’s Civil Engineering Cultural Heritage property in 2009, the first structure designed as that property outside Japan. Its design, planning and construction were undertaken by the Japanese civil engineer Yoichi Hatta. The Wusanto Dam stands at the bottom of Wusan Mountains at the height of 468m above the sea level and has a hydroelectric power station. That dam is 1274 meter-long and has the storage capacity of 1,541,580,000 m<sup>3</sup>. It was constructed by “semi-hydraulic fill method” 80 years ago and is still in use today. A ceremony to mark the dam designated as the Civil Engineering Cultural Heritage property was held at a hotel located in the Wusanto Reservoir scenic area on November 21, 2009, and 182 persons came together to celebrate that. At that ceremony, Dr. Hiroshi Yoshikoshi (JSCE Fellow) a former JSCE board member presented a certification of Civil Engineering

Cultural Heritage property and inscribed plaque to the chairman of Chia-Nan Irrigation Association (Photo 1).



Photo 1 : A ceremony to mark the Wusanto Dam designated as Civil Engineering Cultural Heritage property

Old Tainan Water Supply (est.1922) was the second Civil Engineering Cultural Heritage property designated outside Japan in 2010. Every phase of the construction of Tainan Water Supply like survey, research, planning and construction were conducted under the leadership of Mr. Yashiro Hamano. After the completion of Tainan Water Supply, a population of 100,000 acquired access to water from the canal which could supply water, up to 13,000m<sup>3</sup> per day. Tainan Water Supply is divided into two areas, water source area and water treatment areas. Taking advantage of different geo-characteristic of those two areas, Tainan Water Supply had the water supply system worked by gravity, which contributed to saving energy consumption in those areas. Also, rapid-filtration was used at a water treatment plant. Tainan Water Supply was operated with the most sophisticated water treatment technologies in Taiwan in those days. Meanwhile, Keage Purification Plant (Kyoto) was the first plant used rapid-filtration system in Japan in 1912.



Mr. Hamano made tremendous efforts in securing water sources safe enough to supply drinking water during his 23-year-long-stay from 1896 to 1918 in Tainan. He helped the people access to safe drinking water instead of getting water from rivers, wells and ground water sources. His effort and contribution to increasing access to safe, clean drinking water, which led to improve hygiene standards and extend people's life expectancy in the areas, have been remembered and appreciated even now. The ceremony to celebrate the Old Tainan Canal being designated as a Civil Engineering Cultural Heritage property was held at a pump room at that water treatment plant on December 11, 2010. There were as many as 93 persons who witnessed that ceremony (Photo 2). Prof. Kenji Sakata a former JSCE President handed a certification of Civil Engineering Cultural Heritage property and inscribed plaque to the director of Taiwan Waterworks Corporation 6th Branch.



Photo 2 : A ceremony to mark Old Tainan Water Supply designated as Civil Engineering Cultural Heritage property

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

## What's Happening

- **2015/5/20**  
EASTS-JSCE JOINT SEMINAR "PUBLIC TRANSPORT DEVELOPMENT: CHALLENGES AND OPPORTUNITIES"  
(Vietnamese-German University, Binh Duong New City)  
>>>[Download Program](#)
- **2015/6/12-13**  
The Institution of Engineers, Pakistan's Annual Convention & Civil Engineering Congress, (Karachi, Pakistan)
- **2015/6/18-20**  
2015 MACE Annual Meeting (Ulaanbaatar, Mongolia)

## 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. 41  
<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 100th Anniversary Postal Stamp was released in September, 2014.  
<http://jsce100.com/node/250> (Japanese Only)
- European Council of Civil Engineers (ECCE) has released the 2nd book in ECCE Book Project, "Footbridges-Small is beautiful."  
17 footbridges are contributed from JSCE:  
<http://www.ecceengineers.eu/>

## 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

Do you have any plans for the Golden Week? Every place is crowded during the Golden Week. I dislike congestion, so I am going to spend with my family at a nearby place. Have a good holiday. (H.U.)

### [Comments and Questions] JSCE IAC: [iac-news@jsce.or.jp](mailto:iac-news@jsce.or.jp)

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