

Japan Society of Civil Engineers

International Activities Center

IAC News No.46

A Message from the President "Promoting Innovation at the Construction Site for the Next Generation"

JSCE marked its centennial in 2014. Reflecting on the past century as well as thinking over the next one, the Society published its bold declaration "100-year Vision on Civil Engineering and Society-Transcending the Boundaries of Civil Engineering to Construct the Foundation of a Sustainable Society."

I would submit that this vision requires us to answer this particular question: who will be doing it? Needless to say, "Constructing the foundation of a sustainable society" calls for civil engineers to successfully deal with numerous challenges like natural disasters and climate changes. In order to do that, the civil engineering community will need talented young people, both male and female, joining and working for it.

It is with this in mind that I initiated, in April of this year, a new Presidential task force "Empowering the Construction Site Team through Innovation." Its central mission is to take a fresh look at construction sites, and to envision, as



Tamiharu Tashiro, Ph.D. 104th JSCE President

JSCE, the construction site of the future, so that younger generations will be willing to come and work there. I think a lot of the JSCE members and others will agree with me on the significance of field experience, which perhaps lies behind my being appointed JSCE President, as someone who has spent thirty years on construction sites.

The task force aims to achieve the following three objectives:

- 1. Improving concrete construction productivity and safety. The task force considers promoting the use of precast concrete elements in construction projects with a possible inclusion of that use in the standard specifications for concrete structures published by JSCE.
- 2. Promoting the use of information and robotics technologies in construction projects. Not only does the task force consider introducing those approaches in response to the anticipated shortage of manpower and the need for productivity improvements, but it also discusses the collection, accumulation and organization of data on design and construction, thereby developing them into infrastructure stock database or "big data".
- 3. Attracting people, young and old, male and female, to the infrastructure area, and bringing cross-disciplinary perspectives to the civil engineering industry. In this effort, we will take advantage of JSCE's public-private-academic network.

We hope that the results of such activities in Japan will be beneficial in overseas projects as well, contributing to building sustainable societies worldwide.

Asian Civil Engineering Coordinating Council (ACECC)'s triennial conference, the 7th Civil Engineering Conference in the Asian Region (CECAR 7), is taking place in Hawaii this August, and CECAR 8 will be held in Japan in 2019. In order to make this conference a success, JSCE, working in tandem with IAC, will start preparing for the conference this year, and further strengthen communication and collaborations with other civil engineering societies in Asia.

Introduction of ACECC TC21 Activity

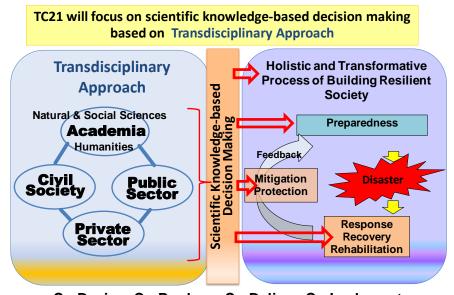
TC21 "Transdisciplinary approach (TDA) for building societal resilience to disasters" chaired by Kuniyoshi Takeuchi, ICHARM (International Center for Water Hazard and Risk Management), was established in October 2015. Transdisciplinary approach is not necessarily new as an idea but has not been widely exercised. It is the international, national and/or local networks of all disciplines and of academia, public sectors, private sectors and civic societies through which scientific knowledge can be effectively applied in decision making.

The aim of TC21 is to promote scientific knowledge based decision making in disaster management. In order to make such a decision making possible, transdisciplinary approach (TDA) is indispensable where scientists of all disciplines and stakeholders of all sectors work together to co-design and co-produce solutions and co-deliver and co-implement them to practice. This aim meets idea of the following guiding principle (partial excerpt) of Sendai Framework for Disaster Reduction 2015- 2030:

III. Guiding principles (e): Disaster risk reduction and management depends on coordination mechanisms within and across sectors and with relevant stakeholders at all levels.....

The first phase (- 2019) started to configure the appropriate methodologies for the investigation in each country. Towards this end, participating members will select past disasters and development cases which are suitable for the case studies of transdisciplinary approach and the efforts in avoiding risk increase and configure the best methodologies of investigation. TC21 will facilitate and guide the activities through exchange of opinions, sharing reports and data of the past case studies with other members. Then, the second phase will be to carry out the investigation and share the results as progresses are made. Although it seems difficult to carry out the activities together with the countries having various conditions of socio-economy, technology, meteorology, culture, and types of disasters, I expect that the activities will move ahead if we can share the effectiveness and actuality of the TDA through the workshops discussing suitable countermeasure of each country.

The first national (JSCE) committee that supports TC21 activities was held in this May and an international workshop with Philippine Institute of Civil Engineers (PICE) is planned to be held in the Philippines in this November.



Co-Design, Co-Produce, Co-Deliver, Co-Implement

Concept of TC21

[Reported by Yoshiki Yamamoto, Secretary, Committee on Asian Civil Engineering Coordinating Council (Nippon Koei)]

A New JSCE Membership "Associate Member"

JSCE opened the first overseas section in Taiwan in April 2000 for purposes of improving member services and providing access to the civil engineering professional community in Japan for those who were interested in the Japanese civil engineering, and then did in Korea, UK, Mongolia, Turkey, Indonesia, Thailand, Philippines and Vietnam to the present.

While seeing rapid economic growth and infrastructure development in the Asian region in response to globalization, we have become aware that the Japanese construction industry is facing increasing intensity of competition in global markets. In order to deal with that challenge in the cooperation with academic, public and private sectors, JSCE established International Activities Center (IAC) in April 2012. The Society, working in tandem with the IAC, has focused on building communication and technical exchange between the JSCE members and local engineers so as to make better contributions to the development of the region. Furthermore, the Society in cooperation with International Cooperation and Collaboration Group in the IAC has been assisting the above international sections to strengthen their functions and increase their members.

In spite of the several efforts that it has undertaken, however, the Society has not been able to stop decline in the international sections' members. The main reason cited for that decline is high membership fees and too little information of the Japanese construction and civil engineering in the monthly JSCE Magazine, which is provided in only Japanese. It is the basic premise for strengthening the international sections that their members can access to the JSCE network and connect with other civil engineering professionals. Considering this premise, the IAC proposed to establish the new membership category "Associate Member," which does not have to pay membership fees, to the Board of Directors and gained their approval. The IAC has been promoting the Associate Members with the international sections since this April.

Associate Member (AM) is outlined as follows:

- 1. All foreign nationals residing outside Japan are qualified to sign up as AM. Those who have studied and/or worked in Japan are strongly invited to join AM;
- 2. AMs are non-official JSCE members, but supporters of the international sections and their activities; and
- 3. AMs are exempt from the payment of annual membership fees, and do not receive the monthly JSCE Magazine.

By promoting the AM, the international sections will not only increase their supporters, but also improve their functions and activities, further develop their networks with those who have studied/ worked in Japan. In the meantime, signing up as the AM will be beneficial for those who would like to follow the latest trends in the Japanese civil engineering community such as new technologies and new projects, have interests in the events of international sections, and look for networking with engineers worldwide. In other words, JSCE needs to provide more useful, interesting information to hold the members' attention as well as to attract potential AMs. Your assistance and support are appreciated.

FY2015 JSCE Awards

JSCE International Award, JSCE Continuing International Award and JSCE International Collaboration Award honored 23 winners at the JSCE Award ceremony held during JSCE General Assembly on 10th June, 2016. For further details, please visit: http://www.jsce-int.org/a_t/international

Four winners were foreigners: the JSCE International Award was presented to one government officer, and the JSCE International Collaboration Award to two professional engineers and one professor (Table 1).

The JSCE International Award recognizes two Japanese civil engineers for their significant contributions to civil engineering progress through their practices in and outside Japan and one foreign civil engineer for his/her significant contribution to the progress of Japanese civil engineering and to the promotion of exchange between Japan and other countries. The JSCE International Collaboration Award recognizes the foreigners who have made great contributions to the progress and development of civil engineering and/or infrastructure improvement in Japan or other countries through the exchange and collaboration with Japan, and who are

expected to play an active role in the civil engineering field in Japan or other countries.

Table 1 The winners	of JSCE Award-Interns	ational Award and	d Collaboration Award
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Award	Winners	Affiliation
JSCE International Award	Romeo S. Momo	Philippine Institute of Civil Engineers, Inc., 2012, 2013 National
		President
		Undersecretary, Dept. of Public Works and Highways, Philippines
JSCE International	Wong Kuok Hung	Oriental Consultants Global
Collaboration Award	Phan Huu Duy Quoc	Shimizu Corp.
		A member of JSCE Vietnam Section
	Kenichi Soga	University of Cambridge
		The President of JSCE UK Section

A celebration for those foreign award winners was held at JICA Global Center on the 9, hosted by IAC. Dr. Romeo S. Momo, Mr. Wong Kuok Hung, and Dr. Phan Huu Duy Quoc attended it and shared their joy with Mr. Noriaki Hirose, the JSCE President, Dr. Tamiharu Tashiro, the President-Elect, Dr. Yumio Ishii a former JSCE President, other JSCE executives and members.







Mr. Momo (center in the left photo), Mr. Wong and Dr. Quoc (second and thirds in the front row, respectively) at the JSCE Award Ceremony

Mr. Momo and Dr. Quoc with JSCE executives at the celebration on 9 June

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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§ IAC Facebook §

Recent activity of International Activities Center is introduced on this Facebook. By all means, please see this home page. (https://www.facebook.com/JSCE.en)

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: <u>iac-news@jsce.or.jp</u>