

Japan Society of Civil Engineers

International Activities Center

IAC News No.51

New Year's Greetings

I would like to wish you all a very Happy New Year in 2017.

Looking back on the last year, we saw in July a horrific militant attack in Dhaka, Bangladesh. Many people were killed, including seven Japanese, and I would like to express my deepest condolences for these victims.

Meanwhile, Japan also suffered a series of major natural disasters including the Kumamoto earthquake and torrential rains in Iwate and Hokkaido. Japan Society of Civil Engineers (JSCE) carried out damage surveys of such affected areas, and it plans to share the findings internationally.

Among a wide range of international activities that JSCE engages in, I participated last year in the 7th Civil Engineering Conference in the Asian Region (CECAR) in August, the International Round Table Meeting in September, the Korean Society of Civil Engineers (KSCE) 2016 Convention in



Tamiharu Tashiro, Ph.D. 104th JSCE President

October and the "Japanese Civil Engineers the Global Leader" Symposium in November, where I had the pleasure of interacting with people from diverse countries.

So let me talk a little bit about CECAR, an international conference held every three years. It was initiated in 1998 by the collaboration of civil engineering societies in Japan, the U.S. and the Philippines, with an increasing participation from the rest of the region. After the success of the first CECAR, a permanent organizer was established in 1999: the Asian Civil Engineering Coordinating Council (ACECC), with participating societies from the original three countries plus Taiwan and South Korea. Thirteen countries are currently members of ACECC.

Last year's CECAR was held in Hawaii, hosted by the American Society of Civil Engineers (ASCE). Of the nearly 200 conference papers that were presented, I was pleasantly surprised that 40% was from Japan, an indication of our strong presence at this meeting.

Tokyo is to host the 8th CECAR in April 2019, for the second time in 18 years since 2001. Until then, the Japan Society of Civil Engineers (JSCE) will serve as the executive office of ACECC. Our International Activities Center (IAC) has formed an organizing committee, taking a lead in preparing for the 8th CECAR.

The preparation activities will be in full swing from this year onwards, and I would encourage men and women of all ages to be involved. It would be wonderful to see talents emerging from them to lead JSCE's international activities.

I would like to thank you all in anticipation of your support and involvement in JSCE's international activities taking place this year.

Report on the Korean Society of Civil Engineers (KSCE) 2016 Convention

KSCE 2016 Convention was held at Jeju Island International Convention Center in South Korea from the 19th to the 21st of October 2016.

Japan Society of Civil Engineers (JSCE) signed a cooperation agreement with KSCE in 1989, and both societies have been actively interacting with each other ever since through activities including sending delegations to each other's annual conference. This year too, JSCE received an invitation to KSCE's convention, and six people: JSCE President Tashiro and his wife, JSCE Executive Director Tsukada, Assoc. Prof. Tokihiko Fujimoto from Shizuoka University, Dr. Kazuya Egami (IAC ICC Korean Gr. Leader, ECOH Corporation) and I, Imamura, attended the convention.

On the first day, October 19th, President Tashiro and his group arrived at Jeju Island via Seoul and attended the welcome reception in the evening. At the reception, President Tashiro gave a speech on behalf of JSCE, encouraging a closer relationship with the attendees from KSCE including former KSCE presidents.

After the reception, the JSCE participants joined JSCE Korea Section members including President Kim Jaekwon, the former president Lee Dong-Uk, and others, to exchange views and ideas. The Korea Section has been contributing to interactions between Japanese and Korean civil engineers for a long time since it was set up in 2000.

On the second day, October 20th, first a ribbon was cut to open the KSCE 2016 Civil Expo. Along with the KSCE President Lee Sung Woo, KSCE executives and domestic guests, President Tashiro took part in cutting the ribbon as a foreign guest. As for the Expo, it was a great success with approximately 60 exhibits from public and private organizations.



President Tashiro giving a speech at the welcome reception



KSCE-JSCE Presidential Meeting

The ribbon cutting was followed by the opening ceremony where President Lee made a speech, awards were presented and the introduction of foreign guests followed. Vice President Lars Hauge of COWI, an international consulting group, gave a keynote speech.

In the afternoon of the same day, the International Roundtable Meeting was held, where the representatives of five countries: Japan, Taiwan, Pakistan, the UK and South Korea, gave talks in association with the theme New & Renewable Energy for a Sustainable Society, and Assoc. Prof. Fujimoto as a representative of JSCE, gave a talk with a title "Small Hydropower Technologies and Networks in Asia."

Following the above meeting, the JSCE-KSCE Presidential Meeting was held with KSCE President Lee, the succeeding president Park Young Suk and others. At the meeting, JSCE introduced the 8th Civil Engineering Conference in the Asian Region (CECAR 8), which will be held in Tokyo in 2019, and the technical committee, in relation to disaster prevention, which was set up by the Asian Civil Engineering Coordinating Council (ACECC) upon the proposal made by JSCE. The "Infrastructure Health Report Road Sector Trial Version", which was publicized in May, was also introduced and views and opinions are exchanged. The meeting confirmed the sound ties between JSCE and KSCE, which will be strengthened through various activities

including cooperation towards the success of CECAR 8.

Lastly, the JSCE participants attended the banquet where everybody enjoyed the entertainments including the choir performance by the Civil Harmony and traditional Korean folk music. On the morning of the 21st, the JSCE participants left Jeju Island to return to Japan.

[Reported by Takashi Imamura, JSCE Headquarters (Kajima Corporation)]

TC21 held two meetings in Honolulu with great success.

As already reported in the IAC News No.46, TC21 "Transdisciplinary approach (TDA) for building societal resilience to disasters" chaired by Dr. Kuniyoshi Takeuchi, ICHARM (International Center for Water Hazard and Risk Management), was established in October 2015. Transdisciplinary approach means 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.

This article reports the kick off events of TC21, the first business meeting and the panel discussion held in Hawaii on August 31 and September 1, 2016.

The main members of TC21 met for the first time in Hawaii and performed the kick-off meeting on August 31st (18:00 – 19:30) at Hilton Waikiki hotel, Honolulu. There were 30 attendances representing each country's civil society: namely ASCE (USA), CICHE (China), HAKI (Indonesia), JSCE (Japan), KSCE (Korea), PICE (Philippines), and VFCEA (Vietnam). Fundamental objectives, concepts and organization structures presented by the co-chairs Dr. Takeuchi, Dr. Momo and the secretary Prof. Tsukahara were accepted in principle by all attendants. In addition, it was discussed that responsibility and role of the National Team will be different from state to state, depending on the nature of the disasters, conditions of vulnerability, exposure to hazards, and socioeconomic conditions etc.

TC21 has also organized and performed the panel discussion on 'Transdisciplinary Approach to Build Resilient Society' on September 1st (9:00–10:30) 2016 at Hilton Waikiki hotel, Honolulu Hawaii (Photo). Six presentations were performed by the core members of the TC21. There were more than 50 attendances which were close-to-capacity of the venue. This active attendance shows the expectation to the activity of TC21. The discussion among the presenters and the attendee was



The panel discussion of TC21 on September 1st at Hilton Waikiki hotel, Honolulu Hawaii (Dr. Li Wei-Sen on-line from Taiwan: lower photo on the right)

active. It was discussed how resilience should be defined and how to be evaluated in society. In addition, some comments emphasized the importance of information sharing on TC21.

TC21 will organize workshop as the side event of committee meetings of ACECC (Asian Civil Engineering Coordinating Council) in Nepal in 23rd – 25th March, 2017.

[Reported by Masashi Inoue, TC21 National team member (Eight-Japan Engineering Consultants Inc.)]

Activities of Applied Mechanics Committee, JSCE

Applied Mechanics Committee started in September 1994 to improve the common platform in the mechanical discipline in the civil engineering field, where collaborative research is encouraged among relevant fields, thus, contributing to the development of theoretical (analytical) mechanics, experimental mechanics and computational mechanics. Since then, using "applied mechanics" as the keyword, the Committee has created a community of researchers and engineers from all sectors, who have been engaged in cutting-edge research activities in civil engineering, with the main focus on pure research.

In particular, Symposium on Applied Mechanics, which has been held every year since 1998, provides an opportunity for many researchers, engineers and students both at home and overseas to present the achievements of their

cutting-edge research in applied mechanics. Their research papers are reviewed and subsequently published annually in the Journal of JSCE A2 (Applied Mechanics) Special Edition (Journal of Applied Mechanics). At present, around 200 oral presentation applications and nearly 100 papers for review are received every year by five editorial departments (physics/mathematics/mechanics problems, computational mechanics, mechanics of materials/complex phenomena, fluid mechanics and infrastructure/analysis).

The next Symposium will be held at the Yoshida campus, Kyoto University on Saturday 20th May and Sunday 21st May 2017.

Meanwhile, every year, the Applied Mechanics Committee holds an Applied Mechanics Forum at JSCE's eight regional chapters in Japan so that many members can attend the Forum and the achievements of cutting-edge research can be returned to the regional communities. The Applied Mechanics Seminar and the JSCE Annual Meeting are also held annually, and at these events, the Committee organizes research discussions for the members on the latest research topics in applied mechanics, including fluid mechanics, inverse problems, disaster simulation and V&V (Verification and Validation), and actively promotes applying the latest achievements in practice and contributing them to education.



Prof. Norihiro Izumi Chair of Applied Mechanics Committee (Hokkaido University)



Posters of the Symposium on Applied Mechanics on display





Research discussion in progress (2016)

Lastly, for further information about what the Applied Mechanics Committee does, please visit the Committee's website. URL: http://www.jsce.or.jp/committee/amc/index.html.

*The English translation of text, which originally is written in Japanese, is done by IAC.

Updates

◆The summary of feature articles in the January 2017 issue of the JSCE Magazine is available on the JSCE website.

http://www.jsce-int.org/pub/magazine

- ◆ Five projects introduced in the booklet "TRANSFER OF CIVIL ENGINEERING TECHNOLOGY IN SERVICE" issued at the time of the 100th year anniversary of JSCE can be viewed on the JSCE Website. http://www.jsce.or.jp/e/archive
- ◆Civil Engineering Design Prize 2016, JSCE has been announced; Grand prize is presented to 4 projects as follows:



Otagawa-Ohashi Bridge



Redevelopment of the around basin of Shiraitonotaki-Waterfalls



Tenjingawa-Watergate



Stream restoration project in Kamisaigo River

http://www.jsce-int.org/a_t/civil

♦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

§ IAC News Subscription §

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§ IAC Facebook §

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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