

### **Japan Society of Civil Engineers**

**International Activities Center** 

## IAC News No.112

# International Joint Seminar on ADVANCES IN CIVIL ENGINEERING

On December 4, 2021, the "International Joint Seminar on ADVANCES IN CIVIL ENGINEERING (Chairman Prof. Sci Nguyen Dinh Duc) was held jointly by the Social Infrastructure Program of Vietnam Japan University (Hanoi, Vietnam) and JSCE. Vietnam Japan University is one of the universities under the umbrella of the Vietnam National University (VNU) and opened its doors in 2016 with the help of both the Vietnamese and Japanese governments. Vietnam Japan University offers eight master's programs that were established as part of a technical cooperation project by JICA. The Social Infrastructure Program is one of them.

The theme for this year, which is the first time this event has been held, was "Applications of Advanced Materials and Machine Learning in Civil Engineering", and the following five presentations were made:

	Presentation Title	Presenter
1	Prediction of steel structures' responses using machine	Dr. Truong Viet Hung,
	learning: Prospects and challenges	ThuyLoi University, Vietnam
2	Research and Applications of 3D printing: Current	Dr. Phuong Tran, RMIT University
	problems and future direction	Melbourne, Australia
3	On Applications of DC algorithm and machine learning	Dr. Tran Duc Quynh,
		VNU International School, Vietnam
4	Image-language collaborative AI that reflects expert	Dr. Pang-Jo Chun, Assoc. Prof.,
	knowledge to inspect and diagnose bridges	The University Tokyo, Japan
5	Bridge inspection, damage detection and monitoring	Dr. Ji Dang, Assoc. Prof.,
	using UAV, AI and IoT	Saitama University, Japan

Despite currently making lots of headlines, AI/machine learning is a difficult field to understand. Nonetheless, all the presentations were to the point and easy to understand, and there was a lively Q&A session involving more than 40 attendees in person and remotely.

I would like to thank Dr. Ji Dang and Dr. Pang-Jo Chun who participated from the Japanese side as well as Ms. Shibuya of JSCE for their hard work in making sure this event was a success, despite having very little time to prepare. Thank you very much. This seminar is scheduled to continue next year, and I sincerely hope that Vietnam Japan University can contribute to further strengthening the ties between Vietnam and JSCE.



[Reported by Dr. Shinichi Takeda, Assoc. Prof., Vietnam Japan University)]

## Initiatives of the YP Group under the Japanese Section of the World Association for Waterborne Transport Infrastructure (PIANC-Japan)

#### Introduction

Established in 1885 with its headquarters in Brussels, Belgium, the World Association for Waterborne Transport Infrastructure (PIANC) is a non-political and non-profit international organization that carries out a wide range of activities such as research on the technical issues of ports and shipping routes, etc., as well as giving technical assistance to developing countries. Currently, PIANC has about 500 corporate members and 1,800 individual members in 66 countries all over the world.

In Japan, the Ministry of Transport (currently the Ministry of Land, Infrastructure, Transport and Tourism) was involved in PIANC as a governmental member in 1952, and the Fisheries Agency was involved as a governmental member in 1965. In 1977, PIANC-Japan, the Japanese section of PIANC, was established. Since then, PIANC-Japan has been the most active of all the sections in Asia, with the vice-president of PIANC coming from Japan. In addition, since the guidelines (technical standards) established by PIANC are widely referred to internationally, the public and private sectors are working together to develop Japanese technical



Asia-Pacific Seminar in South Korea (2018)

standards so that Japanese companies can easily adapt to the PIANC guidelines.

These efforts will be introduced at The 5th Annual Seminar on the Internationalization of Technical Standards (PIANC), "The Internationalization of Standards as per the Activities of the World Association for Waterborne

Transport Infrastructure (PIANC)," scheduled to be held on Tuesday, March 8, 2022 (<u>https://committees.jsce.or.jp/kokusai/node/255</u>). The seminar will also introduce the activities of the young engineers at PIANC-Japan. In advance of the seminar, we would like to take this opportunity to introduce the efforts of the Young Engineers Group (YP Group).

#### What Is the YP Group?

PIANC-Japan has set up a YP Group for young engineers (Young Professionals: YP) under the age of 40 in Japan, with the aim of building a network between young engineers and improving their credentials. The YP Group is very unique, consisting of about 80 young port engineers (as of January 2022) from various organizations such as the Ministry of Land, Infrastructure, Transport and Tourism, Fisheries Agency, research institutes, port management companies, construction companies, design consultants, and manufacturers. Not only exchanges between young engineers in Japan but also many exchanges with young

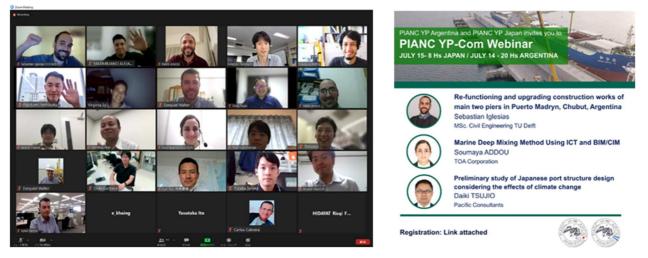


Site Tour of Tobishima Pier Area at Nagoya Port (2019)

engineers from all over the world are planned at YP-Com (a committee of young engineers), which is made up of representatives from many different countries.

#### Changes in Activities during the Coronavirus Pandemic

Before the coronavirus pandemic, the Japanese section met twice a year, and held port-related site tours and technical seminars. For international exchange, an overseas event was planned about once a year, with an Asia-Pacific seminar held in South Korea in 2018, and a site tour held in Singapore in 2019. As things stand, any meet-ups in person have been postponed.



An Online Seminar with YPs from Argentina Experiencing a 12-Hour Time Difference (2021)

\*For information on these past activities, please visit the YP Group website: <u>http://pianc-jp.org/ypcom/index.html</u>.

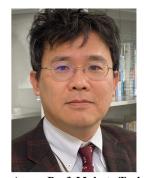
#### New Developments and What the Future Holds

The best thing about holding activities online is that it is easy to get involved, and the number of YPs who participate in the activities for the first time through the aforementioned seminar series has increased. By putting out information about the holding of seminars to a wide audience beyond just PIANC members, the activities of the YP Group are beginning to expand in various ways, such as welcoming senior members over the age of 40 and port engineers that are not PIANC members to our seminars. However, the seminars can tend to end up being one-way communication with the presenter talking and the attendees listening, and we feel that we have not been able to develop deeper exchanges between the YPs. We hope that if we can hold social gatherings regularly as before, the interaction between YPs will see new life breathed into them. The number of members of the YP Group is increasing annually, and we hope that, through various events in the future, the Group will help young engineers shift some of their attention to what is happening overseas. If you are interested in joining the YP Group, please feel free to contact us at one of the e-mail addresses below.

[Reported by Masayuki Banno, Representative of YP Japan, Port and Airport Research Institute (<u>banno-m@p.mpat.go.jp</u>), Naozumi Yoshizuka, Deputy Representative of YP Japan, Nikken Kogaku Co., Ltd. (<u>yoshizuka@nikken-kogaku.co.jp</u>)]

## The 14th EASTS International Virtual Conference

The Eastern Asia Society for Transportation Studies (EASTS) was established in 1994. As of September 2021, EASTS has 19 national societies from 19 countries and regions as members, based on the Society's principle of promoting the exchange of many transportation-related professionals. The society holds an international conference every two years, and since the first conference in 1995, it has held 13 conferences until 2020. The 14th conference, to be held in Hiroshima in 2021, is scheduled on September 12-14 at the Higashi Senda Campus of Hiroshima University, and preparations for the conference have been underway by the conference committee led by Hiroshima University. Since all the games in the Tokyo Olympic Games held from July 23 to August 8, were held without spectators, and since COVID-19 in Japan was still in the middle of the fifth wave



Assoc. Prof. Makoto Tsukai (The Conference Committee of EASTS, Hiroshima University)

at the end of July, the Hiroshima EASTS conference was held online using the Zoom system for the first time in the history of the society. The conference was supported by the Asian Development Bank Institute (ADBI) as a conference partner, the Chugoku Regional Development Bureau of the Ministry of Land, Infrastructure and Transport, Hiroshima Prefecture, the Research Center for Disaster Prevention and Mitigation of Hiroshima University and the Japan Society of Civil Engineers. The conference program consisted of 4 plenary sessions (Keynote speeches, EASTS-ADBI-WCTR, Panel discussion, EASTS-ADBI), 13 presentation sessions organized by International Research Groups, and 94 general sessions. In the opening ceremony, some guests of honor: the Minister of Land, Infrastructure, Transport and Tourism, the president of JICA, the governor of Hiroshima Prefecture



**Keynote Speeches** 

and the president of Hiroshima University kindly offered their congratulatory speeches. The contents of the keynote speeches are shown in Table. In this session, there were about 280 online participants from 25 countries and regions. Of the 380 participants who answered the questionnaire after the conference, more than 90% were satisfied with the online session. On the other hand, about 85% of the participants wanted the next conference to be held face-to-face. The online conference is certainly significant in lowering the hurdle to participation, but face-to-face discussions have inherent value. At the 2023 conference, we hope to have a conference where many valuable research encounters can take place.

The conference was awarded "International Conference Host Award 2020" by Japan National Tourism Organization (JNTO).

This conference is supported by International Scientific Exchange Fund.

[Reported by Makoto Tsukai, The Conference Committee of EASTS, Hiroshima University]

