The Asian Civil Engineering Coordinating Council (ACECC) 42nd Executive Committee Meeting in Jakarta

1. Overview
The Asian Civil Engineering Coordinating Council (ACECC) is an organization established in September 1999 to improve and develop sustainable social capital in the Asian region. At present, 15 academic societies are affiliated with the ACECC, with the organization engaged in various activities to promote learning and skills with the cooperation of civil engineering-related academic societies. The Executive Committee Meeting (ECM), the highest-level decision-making body of the ACECC, is held twice a year by affiliated academic societies on a rotating basis. This 42nd ECM was held online on March 28 and 29, 2022, hosted by the Indonesian Society of Civil and Structural Engineers (HAKI). From the Japan Society of Civil Engineers (JSCE), the main attendees were JSCE Representative Eiki Yamaguchi (Kyushu Institute of Technology), Chairperson Hironori Kato (The University of Tokyo), Vice-Chairperson Hirofumi Ohnishi (KATAHIRA & ENGINEERS INC.), and myself. In addition to the ECM, the Technical Committee 14 (Sustainable Infrastructure) seminar and the Future Leaders Forum seminar were also held, but they have been left out of this report due to space restrictions. Photo 1 shows the online video conference and Table 1 shows the schedule of each event.

Photo 1: Video Conference
2. Technical Coordination Committee Meeting (TCCM)
At the TCCM, reports were made on the efforts of the 11 Technical Committees (TCs) that are currently engaged in activities. Regarding TC21 (Transdisciplinary Approach for Building Societal Resilience to Disasters), for which JSCE serves as Chair, Chair Mikio Ishiwatari (The University of Tokyo) reported the status of the Special Session at the JSCE Annual Meeting, the field survey in the Philippines, and the activity plan for CECAR 9, among other topics. With regards to the JSCE-led TC 28 (Application of Monitoring Technology for Infrastructure Maintenance, TC Chair: Professor Eiki Yamaguchi of Kyushu Institute of Technology), which was approved by the ECM last time, TC member Mr. Masaaki Nakano (Nippon Koei Co., Ltd.) reported that 13 participants from 9 member organizations had grouped together.

In addition to the TC activity reports, the Korean Society of Civil Engineers (KSCE) proposed a new TC entitled “Network Construction and Joint Utilization of Large-Scale Experimental Facilities,” and its establishment was approved as TC29. This area is one of the fields in which Japanese technology leads the way, and I would like to consider dispatching members from JSCE with an eye on future trends. There were also discussions on how to handle the ACECC Code of Ethics currently being drawn up by TC17 (Ethical Practices to Reduce Corruption) as well as reviewing the guidelines for TC activities. The conclusion to the discussions, however, was carried over to the next ECM.

3. Planning Committee Meeting (PCM)
At the PCM, there was a lot of discussion about the policy for holding the 9th Civil Engineering Conference in Asian Region (CECAR 9) to be held in Goa, India in September 2022. The Institution of Civil Engineers (ICE, I), which is the organizer of CECAR 9, strongly hoped to hold the event in an in-person format and proposed two possibilities of either holding the event as scheduled or postponing it by one year. Attendees expressed a variety of opinions on this matter, and so a decision was carried over to the ECM the next day. In other news, the outcome of the vote was reported for the three ACECC Awards (Project Award, Achievement Award, and TC Award) that will be awarded at CECAR 9.

4. Executive Committee Meeting (ECM)
At the ECM, the decisions made at the TCCM and PCM were approved. The representative of Engineering New Zealand, which had applied to join the ECM, introduced the organization, and its membership was unanimously approved. Regarding the ACECC Awards, it was decided that all of the following three submissions from JSCE would receive high scores and each be awarded:

---

### Table 1: Schedule of the 42nd Executive Committee Meeting

<table>
<thead>
<tr>
<th>Date</th>
<th>Local Time in Jakarta</th>
<th>Local Time in Japan</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, March 28</td>
<td>11:00-13:30</td>
<td>13:00-15:30</td>
<td>Technical Coordination Committee Meeting (TCCM)</td>
</tr>
<tr>
<td></td>
<td>14:30-17:30</td>
<td>16:30-19:30</td>
<td>Planning Committee Meeting (PCM)</td>
</tr>
<tr>
<td>Tuesday, March 29</td>
<td>11:00–11:30</td>
<td>13:00-13:30</td>
<td>Confirmation of TCCM and PCM Minutes</td>
</tr>
<tr>
<td></td>
<td>11:30-14:10</td>
<td>13:30-16:10</td>
<td>Executive Committee Meeting (ECM)</td>
</tr>
<tr>
<td></td>
<td>14:40-16:00</td>
<td>16:40-18:00</td>
<td>TC14 Seminar</td>
</tr>
<tr>
<td></td>
<td>16:15-17:45</td>
<td>18:15-19:45</td>
<td>Future Leaders Forum Seminar</td>
</tr>
</tbody>
</table>
• **Project Award**: Aso Ohashi Bridge Area Slope Disaster Prevention Measure Construction by Kumagai Gumi and Kyushu Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism

• **Achievement Award**: Dr. Osamu Kusakabe (former ACECC Chair, Executive Director of International Press-in Association, Professor Emeritus of Tokyo Institute of Technology)

• **TC Award**: TC21 Transdisciplinary Approach for Building Societal Resilience to Disasters

After this, discussions were held on the holding of CECAR 9, which had been carried over from the PCM. At the start, Dr. S. L. Swamy, Chair of ICE, I, proposed a policy that CECAR 9 should be held as an in-person event this September as scheduled and only participants from countries/regions from which it is difficult to travel to India should be allowed to participate online. There was no major opposition to this policy and it was accepted. JSCE’s online attendance to CECAR 9 was accepted because the situation surrounding the coronavirus pandemic is still unclear.

5. Conclusion

With regards to CECAR 9, although JSCE’s participation both online and in-person was given the green light, we would like to assist the committee in charge of CECAR 9 so that as many individuals as possible from Japan can attend the event in person. The next ECM will be held in Goa, India, the day before CECAR 9.

Shri Prithipal Singh (ICE, I), Chair of the Local Organization Committee (LOC) for CECAR 9, passed away suddenly in January 2022. It is extremely unfortunate that he passed away without witnessing the success of CECAR 9. I would like to pay tribute to him and offer my deepest condolences. Professor T. R. Piplani (Secretary General of the ICE, I) has been appointed as the new chair.

【Reported by Jun Izawa, Secretary-General of the Committee on Asian Civil Engineering Coordinating Council, JSCE (Railway Technical Research Institute)】
The ACECC Future Leaders’ Forum (FLF) was devised and established in 2017 with the aim of recruiting and encouraging networking between young civil engineers around the age of 30 to further strengthen the connections between young civil engineers at academic societies that are members of ACECC. From JSCE, Dr. Rajali Maharjah (Japan Transport and Tourism Research Institute) and myself are involved as members of the FLF.

Since 2021, a Zoom webinar entitled “FLF Monthly Webinar Series” has been held about once a month, with a different member academic society acting as the host each month. The webinar focuses on civil engineering issues in the Asia-Pacific region, technological trends related to civil engineering, and raising issues for achieving sustainable growth. A webinar was held on Saturday, February 19, 2022, hosted by JSCE’s Committee on Asian Civil Engineering Coordinating Council.

The webinar, hosted by JSCE, was facilitated by FLF member Dr. Rajali Maharjah and saw three lectures by Dr. Shanthanu Rajasekharan (Aster Co. Ltd.), Associate Professor Muneyoshi Numada (The University of Tokyo), and myself.

In many developing countries, structural fragility is an issue. However, the fact that it is difficult to obtain expensive and high-quality structural materials presents a dilemma. Also, with recent calls to achieve carbon neutrality, reducing CO2 emissions during the construction of large-scale civil engineering structures is an important issue to be examined regardless of the country in question. Against this backdrop, this seminar focused on “Civil engineering’s contribution to carbon neutrality” as a webinar topic, and the attendees discussed the role of civil engineering in a carbon-neutral society while giving concrete examples in the lecturers’ fields of expertise. Countries located in the Pacific Rim have many things in common, such as suffering storms and floods caused by earthquakes and typhoons. Many questions were asked by those viewing the seminar.
online and there were lively discussions regarding Japanese civil engineering technologies that are both environmentally friendly and reduce damage to physical property and human suffering caused by such external forces.

Through this monthly webinar, I think that while the novel coronavirus pandemic has its disadvantages in that overseas travel and in-person participation in international events are restricted, I personally feel that thanks to the rapid widespread use of Zoom and social media platforms, the opportunities for discussions with overseas engineers and researchers have, in fact, increased because of the pandemic. I think that the fact that the “communication gap” with those outside of Japan has been drastically bridged by the significant external force of the pandemic is a very important turning point for each country to work together and promote problem-solving on a global scale. If you are a young engineer or researcher who is interested in networking with overseas civil engineers and solving problems on a global scale from the aspect of civil engineering, I encourage you to get involved with the activities of FLF today!

**Topic: Civil engineering’s contribution to carbon neutrality**

*Moderator: Dr. Rajali Maharjah (Japan Transport and Tourism Research Institute)*

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Geotechnical investigation of CO2 sequestration into seabed ground using carbon dioxide hydrate</td>
<td>Dr. Hiromasa Iwai, Nagoya Institute of Technology</td>
</tr>
<tr>
<td>2 Strengthening masonry buildings through innovative seismic retrofitting technology and its potential impact on CO2 emissions</td>
<td>Dr. Shanthanu Rajasekharan, ASTER CO., LTD.</td>
</tr>
<tr>
<td>3 Disaster Management Process Approach</td>
<td>Dr. Muneyoshi Numada, Institute of Industrial Science, The University of Tokyo</td>
</tr>
</tbody>
</table>

【Reported by Assoc. Prof. Hiromasa Iwai (Kyoto University)】

*Associate Prof. Iwai was at the Nagoya Institute of Technology when he attended at the FLF.*
Hi! I’m Isabella and I am from the Philippines. I am currently a graduating student at the Graduate School of Engineering of Kyoto University. In March of 2020, I earned my bachelor’s in engineering degree from the International Course Program of Civil Engineering of Kyoto University.

I am very grateful that I had this opportunity to share my experiences as an international student in Japan. Ever since I was young, I have dreamt of living in Japan. It has always been a second home to my family, with both my parents having lived here before I was born. Growing up, we would often travel to Japan and go to science museums, parks, Tokyo Disneyland, and DisneySea. From a young age, I had already been fascinated by towers, buildings, and other structures. Whenever we would travel to Japan, we would marvel at the bridges we would pass through and the skyscrapers and towers we would see along the way. With both of my parents being engineers, I knew early on that I wanted to become a civil engineer myself. Coming from the Philippines, I knew that Japan is one of most advanced countries in the field, with several infrastructure projects in the Philippines being products of ODAs from Japan. So, when the opportunity to study in an international course in civil engineering in one of the top universities in Japan came, I knew I had to take it. I tried my best in the application process and was fortunately awarded a slot in the program. In March of 2016, two days after I turned 18, I packed my bags and moved to Japan.

I learned so many things when I moved to Japan, not just about academics, but also about daily life - something everyone has probably experienced after moving out of their homes. Academically, one of the biggest decisions you must make as an undergraduate student is what specialization you would like to pursue. In the first three years of university, you attend various classes and gradually learn the basics of the four major fields of civil engineering: structures, transportation, environmental, and geotechnical. I chose to specialize in transportation, as I was particularly interested in traffic systems and the urban planning involved in creating efficient transportation networks. Throughout my time in Japan, I have had the opportunity to work on several projects, both in Japan and back home in the Philippines, applying the knowledge and skills I have gained. I am grateful for this experience and look forward to continuing my education and pursuing a career in the field of civil engineering.
engineering: structural, geotechnical, hydraulics, and urban planning. It was a very tough decision as I found all fields interesting, but as I went through all the courses, geotechnical engineering just stood out for me. In my fourth year, I joined the Geomechanics laboratory of Kyoto University. In the same year, I was fortunately granted a slot in the master’s program for the following academic year with a scholarship from Ueda Memorial Foundation. I did my thesis which focused on centrifuge modeling and was set to graduate in March 2020. After I successfully passed my thesis defense, I went back home to the Philippines for a short vacation before my graduation. Little did I know that my 3-week stay at home would eventually become 2 years, with me studying in Kyoto University all the way from Manila, Philippines.

The COVID-19 pandemic has significantly affected our lives, but throughout these past 2 years, I realized that the pursuit of knowledge never stops. Using modern technology to our advantage, we continued to hold classes and submit assignments through online platforms. Despite the current conditions, not once were our classes suspended. Professors and students continuously worked together to make our virtual classroom a place for learning. I successfully passed my courses in the first year and even had the opportunity to be a teaching assistant for two semesters. As for my research, my professors and I had to adapt to the situation while maximizing my research activities. I learned how to do finite element modelling for my research, which I was able to do all the way from Manila. I participated in online conferences, where I interacted with other students and professors from different universities and institutions in Japan. In February of 2022, I successfully passed my thesis defense. Until now, I can’t believe that I accomplished the requirements of my program more than 2,000 km away from my university. After 2 years of being away, I have finally been able to return to Japan and I am actually writing this article as I wait for my quarantine period to end. The past 2 years have definitely been quite a challenge, but as researchers, our minds are wired to find and test solutions to problems. We do not do it because we have to, but because it is part of who we are. Our desire to learn and share knowledge has not and will never stop.
【Reported by Isabella Galarosa MARTINEZ (Kyoto University)】

* This report was written in March 2022.

Updates

◆ JSCE-ASCE Infrastructure Resilience Research Group
  https://www.infraresil.jp/

◆ The International Infrastructure Archives
  – A Compilation of Japan’s Greatest Projects in Transfer of Civil Engineering Technology in Service –
  http://www.jsce.or.jp/e/archive/

◆ The 9th Civil Engineering Conference in the Asian Region (CECAR9)
  https://cecar9.com/


◆ American Society of Civil Engineers (ASCE)
  • ASCE Convention 2022

◆ The 9th International Conference on Flood Management (ICFM9)

◆ IAC “News Pick Up!!” on the JSCE Japanese website
  https://committees.jsce.or.jp/kokusai/iac_dayori_2022

◆ Summary of featured articles in JSCE Magazine Vol. 107, No.6 June 2022
  http://www.jsce-int.org/pub/magazine

◆ Journal of JSCE
  https://www.jstage.jst.go.jp/browse/journalofjsce
§ 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.

§ IAC Facebook §
Recent activity of International Activities Center is introduced on this Facebook. 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: iac-news@jsce.or.jp