

Japan Society of Civil Engineers

International Activities Center

IAC News No.133

The JAC News introduces significant and unique international projects, technologies, symposium, communication undertaken by J&CE JAC, International Section, ACECC, and Research & Development Section with over 30 committees, state-of-art-civil engineering technologies and projects, great and interesting achievements of civil engineer and researcher once a month.

This month's issue features 2023 J&CE Annual Meeting International programs and JICA's Ramp Seminar.

We are happy to receive your interests, requests and feedbacks anytime. Thank you.

2023 JSCE Annual Meeting

IAC Discussion: Junctions, Paths, and Future, Crossroads of Civil Engineering

The IAC Discussion was held at the International Conference Center Hiroshima (ICCH) on Wednesday, September 13 from 10:00 to 12:00. It was held both in-person and streamed on Zoom, with a total of 92 people in attendance.

Just like the event the previous year, this discussion adopted "Crossroads of Civil Engineering" as its main theme, acting as an opportunity for everyone involved in civil engineering to continue to think about what path we should take. This event, which was the second time the IAC Discussion has been held in its history, focused on 'big global projects,' as well as 'carbon neutrality,' which continues to drive sudden changes in legislation all over the world.



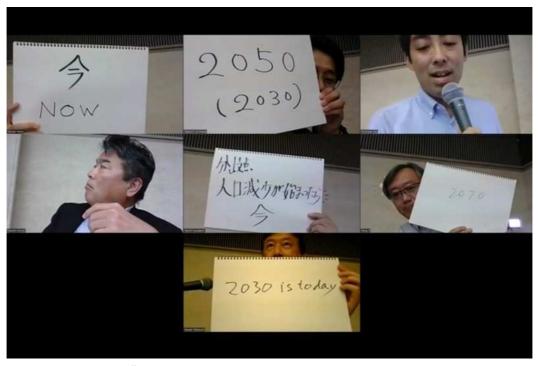
Assoc. Prof. Hiromasa Iwai (Kyoto University)

An opening speech by Makoto Kimura, Senior Director of the International Activities Center, began proceedings, followed by two keynote lecturers during the first half.

Takeshi Kawakami, Managing Executive Officer at IHI Corporation, gave a keynote lecture on the topic of "The Sustainable Deployment of Bridge Projects in Turkey, Europe through Long Bridge Engineering," in which he touched upon the differences in how bridge projects are conducted overseas and in Japan. While I sensed a difference in the speed at which things get done overseas and in Japan, I learned that Japanese civil engineering technologies are doing great things all over the globe.

Next, Masaki Tokubuchi of ARUP gave a keynote lecture on the subject of "Sustainability and Building Construction," in which he discussed global carbon neutrality efforts in the construction field. I learned that in Europe, legislative changes to realize carbon neutrality are advancing at a fair rate and that there are a wide variety of circular economy efforts that play a part in this.

In the second half of the event, Mr. Kawakami, Mr. Tokubuchi, Professor Michael Henry (Shibaura Institute of Technology), Associate Professor Takafumi Nishikawa (Nagasaki University), and Associate Professor Ji Dang (Saitama University) all took the stage for a panel discussion. Following on from the keynote lecturers, the discussions mainly focused on the issues of 'Can you feel the carbon neutrality efforts in Japan first hand?' and 'How is the increase in demand for civil engineering infrastructure as a result of an increase in the population balanced with the opposing challenge of carbon neutrality?' At the end of the panel discussion, the panelists were asked, "When is the crossroads of civil engineering in Japan?" to which all the panelists responded, "Now" (= it's the last opportunity). The sense of an impending crisis toward this issue that involves the whole of humanity is clear.



"When is the crossroads of civil engineering in Japan?"

Lastly, Makoto Kimura, Senior Director of the IAC, put up the strong message of "No more following precedents" as a comment to wrap up the conference. The next event in 2024 will also continue discussions about the "Crossroads of Civil Engineering." I want to make it a memorable conference that breaks away from past events by adopting the notion of "No more following precedents."



"No more following precedents"

[Reported by Assoc. Prof. Hiromasa Iwai, Kyoto University]

JICA RAMP Seminar for International Students

The Japan International Cooperation Agency (JICA) has established a Road Asset Management Platform (RAMP) to support the overseas deployment of technologies relating to road asset management in Japan and to develop the core personnel of developing countries. In its long-term training project, which is a RAMP initiative, JICA has accepted a total of 71 individuals from 17 countries since 2017, including officials from various government ministries, research institutions, and universities, for long-term training at Japanese universities as master's or doctoral students until April 2023.



Ryuhei Kondo (The Japan International Cooperation Agency)

During the long-term training project, a seminars are held for international students to create opportunities for them to deepen their understanding of the technologies and

efforts related to road maintenance and management in Japan during their stay, to learn practical information in the field of road maintenance and management, as well as examine the sharing of domestic knowledge in this field. In recent years, with the help of each expressway company, online lecturers have been held during the COVID-19 pandemic. On this occasion, we will take a look at the international student seminar held at the Shibaura Institute of Technology between the three-day period from August 22 to August 26, 2023, which was attended by 47 long-term trainees.

[Day 1]

The keynote lecture entitled 'Implementation of Digital Twin with Data Platform in Road Maintenance and Management' given by Hiroshi Dobashi, Vice President of the Shutoko Technology Center, introduced the company's road asset management system built using a data platform. Also, the panel discussion, which adopted "Life in Japan and useful information for international students who are new to the country" as its theme, saw discussions about the challenges of studying abroad and how to overcome them. A passionate exchange of opinions took place in which I learned that the challenges that I had personally experienced were common to many of the trainees, and this gave me encouragement.

[Day 2]

Following on from the first day, a report presenting the progress of their research was conducted by each long-term trainee, and through a Q&A, I got to learn a lot about various research topics and tools and approaches that can be used in these areas. During the site visit of Shimizu Corporation's Institute of Technology, feedback from attendees was that they learned about the research outcomes regarding problems caused by natural disasters and how these problems can be resolved using simulations and models, and they were impressed by the effort to resolve these problems unique to Japan.







Research Presentation of Trainee

[Day 3]

During the observation of the bridges over the Sumida River seen from a water bus, attendees were able to actually get a close look at various types of bridges and what kind of maintenance had been carried out to keep the bridges resilient. It was also an opportunity for attendees to build good relations with another student. Responses to the questionnaire following the end of the seminar event included comments such as, "The research presentations of fellow international students were a good platform to get lots of ideas. We got to share our experience and learn about each other." "I learned that we have similar problems despite coming from different countries." "I would also like to observe a construction site next time." I intend to make the most of this feedback to help improve the next seminar event.

To close, I would like to take this opportunity to express my deepest gratitude to Professor Michael Henry of the Shibaura Institute of Technology who assisted the planning and running of the seminar, Hiroshi Dobashi, Vice President of the Shutoko Technology Center, who gave the keynote lecture, and Shimizu Corporation's Institute of Technology that helped with the bridge observation outing.



Prof. Henry with JICA Trainees at Shibaura Institute of Technology

[Reported by Ryuhei Kondo, The Japan International Cooperation Agency]

The 25th International Summer Symposium

The International Summer Symposium has been hosted by the International Student Network Group, International Activities Center (IAC) since 2012, and this year marked the 25th time it has been held. The symposium is held for international students studying civil engineering in Japan, Japanese students, and young civil engineers, to present research, interact and collaborate with people of different nationalities and fields of research, and network in English. This year on September 14 and 15 during the JSCE Annual Meeting, the symposium was held in three parts, consisting of (1) the International Sessions presenting English research papers during the JSCE Annual Conference, (2) the Workshop for Global Civil Engineers, and (3) a networking reception.



Assoc. Prof. Ji Dang (International Student Network Group, IAC)

In the International Sessions (Table 1) from September 14th to 15th, 54 papers were presented across a wide range of fields such as tunnel engineering, geotechnical engineering, structural engineering, disaster prevention and resilience, AI and data science, the environment and materials, infrastructure maintenance, etc. The theme of the JSCE Annual Meeting this year was "Appropriate Population Distribution and Resource Allocation," and by linking both campuses of the Hiroshima University and the Hiroshima Institute of Technology via Zoom, the sessions were held in a whole new format that also enabled presenters to present their research remotely. The sessions, which saw passionate discussions and Q&As span across two days, were full of energy and proved to be a big success. I would like to take this opportunity to express my sincere gratitude to the chairperson, the speakers, and the attendees.

Table 1: International Sessions

| Session Name | No. of papers | Chairperson |
|---|---------------|--|
| Session (1) Tunnel and Foundation | 7 | Assist. Professor Chandra Shekhar Goit (Saitama University) |
| Session (2) Structural Engineering | 7 | Assist. Professor Xinhao He (Tohoku University) |
| Session (3) Urban Lifeline and Disaster Resilience | 7 | Associate Professor Takafumi Kitaoka (Kansai University) |
| Session (4) Construction, Planning and Management | 7 | Professor Kuniaki Sasaki (Waseda University) |
| Session (5) AI, Data Science, DX | 7 | Professor Michael Henry (Shibaura Institute of Technology) |
| Session (6) Construction Material and Waste | 5 | Associate Professor Hailong Wang (Waseda University) |
| Session (7) Geotechnical Engineering | 7 | Mr. Gulsen Feyzullah (Toda Corporation) |
| Session (8) Infrastructure Maintenance | 7 | Associate Professor Yasuo Sawamura (Kyoto University) |
| Total | 54 | |

From 15:30 to 18:00 on September 15, the Workshop for Global Civil Engineers was held in the Reception Hall of the Faculty Club Building at Hiroshima University. The theme for this year was "The Role of Civil Engineering in Achieving the SDGs," and 39 international students participated.

The workshop welcomed Professor Michael Henry (Shibaura Institute of Technology) as the lecturer, and he gave a keynote speech that outlined the SDGs. The participants then split up into 7 groups to discuss what the civil engineering industry and civil engineers in general should do to realize a sustainable society and how can they start to contribute immediately. After passionate discussions, each group gave presentations about their vision of what the civil engineering industry should strive for



Workshop for Global Civil Engineers

and the role of civil engineers to achieve the SDGs. It was a really productive workshop, with one participant saying, "I got a lot of new ideas about SDGs and so on and I was really glad to mingle with so many international students." Next year's workshop will be led by Professor Henry on the same theme of SDGs. We would like to invite all of you to join us.

After the workshop, a networking reception was held from 18:30 in the restaurant La Bohème in the Faculty Club Building. The reception welcomed a total of 36 attendees, with international students who attended the workshop and professors, etc. who were involved as facilitators present to raise their glass. The reception began with a toast by Makoto Kimura, Senior Director of the IAC, and then with myself acting as the host, a report of this year's workshop and his aspirations for next year's workshop was given by Professor Henry.



Networking Reception

The venue was enveloped in a friendly atmosphere and the attendees were encapsulated in endless engaging discussions with each other, making it a really fruitful opportunity for everyone to network.

★ Announcement of the 2023 Joint Company Information Session for International Students ★
The International Student Network Group holds the Joint Company Information Session for International Students every year as an opportunity for Japanese companies to showcase themselves to international students and to provide information about recruitment. This year, we plan to hold this event on Saturday, December 9.
We are currently looking for companies to take part, so if you are interested, please contact us via the JSCE International Activities Center website (https://committees.jsce.or.jp/kokusai/) or contact the JSCE IAC directly.

[Reported by Assoc. Prof. Ji Dang, International Student Network Group (Saitama University)]

We are launching the Host Senpai Program!

The Civil Engineering International Students Support Group (CEIS), which is part of the Int'l Activities Center (IAC) of JSCE, announces its new initiative: **The Host Senpai Program**.

What is the Host Senpai Program?

This program aims to provide foreign students studying civil engineering in Japan with first-hand information by assigning them a senpai (foreign civil engineer working in Japan) who can provide them with close guidance. Students will also have access to networking opportunities, career advice, cultural exchange, exposure to new ideas and friendships! All this under the framework of a variety of activities supported by JSCE which include gatherings, study sessions and site visits.

At this moment the inscriptions are open to register as a **senpai** or as a **student**, so if you are an international civil engineer working in Japan, ready to guide and inspire the next generation of civil engineers, or you are a civil engineering international student in a Japanese University, eager to learn from those who've walked the path before you, don't miss the chance and register here:

Student Registration: https://forms.gle/YdDvnb6VctdvJs726

> Senpai Registration: https://forms.gle/7ptjekLFNh8qRfPs9





Host Senpai Program Registration

International Civil Engineers Group Members

• Contact: intlstudentsjp@gmail.com.

CEIS Facebook page: https://www.facebook.com/profile.php?id=100089190174033.

Updates





- ◆Construction Site Tour for International Students 2023 (November 30) https://www.jsce-int.org/node/841
- ◆ Joint Company Information Session for Int'l Students, Online (December 9) https://www.jsce-int.org/



- ◆IAC "News Pick Up!!" on the JSCE Japanese website https://committees.jsce.or.jp/kokusai/iac_dayori_2023
- ◆Call for JSCE Award Nominations: "International Lifetime Contribution Award" and "International Outstanding Collaboration Award" https://committees.jsce.or.jp/kouken-sho/R5 English
- ◆ Summary of featured articles in JSCE Magazine Vol. 108, No.11, November 2023 http://www.jsce-int.org/pub/magazine
- ◆ Journal of JSCE https://www.jstage.jst.go.jp/browse/journalofjsce
- ◆Call for Papers: Advances in AI, Data Science and Digital Twin https://committees.jsce.or.jp/struct1002/node/36
- ◆ Safe and Healthy Work in the Digital Age 2023-2025 Campaign https://healthy-workplaces.osha.europa.eu/en/media-centre/events/launch-ceremony-healthy-workplaces-campaign-safe-and-healthy-work-digital-age-2023-2025
- ◆CECAR10 : http://www.cecar10.org/

§ 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