

IISEE Newsletter



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IISEE Training Course "Strengthening Seismic Disaster Risk Reduction Countermeasures for Critical Buildings" Closed

By IISEE

The course "Strengthening Seismic Disaster Risk Reduction Countermeasures for Critical Buildings," which started on October 21 and focused on strengthening the seismic performance of critical buildings such as government buildings and hospitals and promptly responding after a disaster strikes so that emergency response and administrative services will not be disrupted in the event of a disaster, closed on December 13 after a two-month schedule.

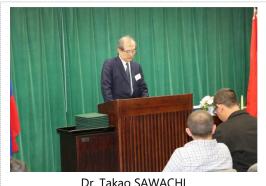
At the closing ceremony held at JICA Tsukuba, all 10 participants from 8 countries (Armenia, Indonesia, Uzbekistan, El Salvador, Kazakhstan, Turkmenistan, Türkiye, and Laos) received certificates from Mr. Makoto TAKAHASHI, Director General, Tsukuba Center, JICA, and Dr. Takao SAWACHI, President of BRI.

Mr. YUCETAS Huseyin Gorkem from Turkey gave a speech on behalf of the participants.

During the training period, the participants enthusiastically learned about structural design concepts and techniques to maintain the functions of important buildings, seismic diagnosis and retrofitting of existing buildings to strengthen earthquake risk countermeasures for important buildings, pre-disaster countermeasures, and post-disaster countermeasures such as emergency risk assessment and restoration techniques.

They also went on a study trip to the Kansai region, where they visited facilities using the latest earthquakeproofing technology and learned how traditional Japanese construction methods are connected to modern technology.

We hope that the participants will use the knowledge they learned in Japan in their home countries and participate in the global network for disaster prevention and mitigation in the future. We look forward to their future activities.



Dr. Takao SAWACHI President of BRI



Mr. Makoto TAKAHASHI, Director General, Tsukuba Center, JICA



Mr. YUCETAS Huseyin Gorkem (from Turkey)



(Short Report) GRIPS-BRI Symposium and IISEE Alumni Meeting Held By IISEE

On December 6, the GRIPS-BRI Co-hosted Symposium and IISEE Alumni Meeting were held. This event marked the 65th anniversary of the International Training in Seismology and Earthquake Engineering, the 20th anniversary of the Master's degree program in Disaster Management Policy (DMP) by the Building Research Institute (BRI), National Graduate Institute for Policy Studies (GRIPS), and Japan International

Cooperation Agency (JICA). 1. The symposium and 2. alumni opinion exchange meeting (IISEE Online Alumni Meeting) were held to commemorate these milestones.

The ex-participants from a wide range of generations, spanning from the 1960s to the early 2020s, gave presentations at the event. We learned that various countries have made progress in research on seismology and earthquake engineering, the development of tsunami early warning systems, and earthquake disaster mitigation measures. Additionally, remarks from Vice Minister Mr. Emilio Ventura from El Salvador, Dr. Gupta from India, and Dr. Aytun (husband and wife from Turkey) were very encouraging.

Large-scale disasters by earthquakes and tsunamis, such as the 2023 Turkey-Syria earthquake, the 2023 Morocco earthquake, and the 2024 Noto Peninsula earthquake, still occur frequently. Therefore, It is

necessary to continuously provide IISEE training courses as a means of human resource development for earthquake and tsunami disaster mitigation.

Details of the symposium and the alumni meering will be shared in the upcoming newsletter and the Bulletin of IISEE.

After the conference, 3. an in-person social gathering event was held. It was a pleasant opportunity to interact with former and current IISEE staff members as well as participants.



Alumni Opinion Exchange Meeting

 GRIPS-BRI Co-hosted Symposium "Achievements and Future Prospects of International Contributions in Disaster Prevention by GRIPS and IISEE"

Format: Hybrid (In-person at GRIPS + Online)

Time: 13:30 - 17:15

Number of Participants: 82 on-site, 100 online

Moderator: Professor Katayama (GRIPS)

- Introduction by Dr. Fujii (Director, IISEE)
- Opening remarks by Mr. Yao (Ministry of Land, Infrastructure, Transport and Tourism) and Dr. Midorikawa (former BRI President)
- Keynote speech by Professor Saito (Toyohashi University of Technology)
- Presentations by 6 ex-participants (moderated by Dr. Shibazaki (Senior Fellow) and Dr. Azuhata (Senior Fellow)): El Salvador, Costa Rica, India, Indonesia, Turkey, and Morocco
- Closing remark by Dr. Yokoi (JICA)

2. Alumni Opinion Exchange Meeting (IISEE Online Alumni Meeting)

Time: 17:20 - 18:10

Moderator: IISEE staff (Dr. Shibazaki (Senior Fellow), Dr. Azuhata (Senior Fellow), Dr. Hara (Chief

Research Scientist)

Number of Participants: 84 online, approx. 60 in-person

o Introduction of IISEE training courses and current staff by Dr. Fujii (Director, IISEE)

 Reports from alumni of Armenia, Nepal, Indonesia, Romania, Chile, Turkey (1965-1966 E course, 1972-1973 S course), and Egypt

3. IISEE Alumni Reception (Social Gathering)

Location: GRIPS Time: 18:20 - 19:30

Number of Participants: 57 (including the BRI President, BRI Vice President, former and current IISEE staff, related staff, current participants (regular course: 12 participants, critical building course: 10 participants), and 4 ex-participants currently in Japan

Report on Kansai Study Trip

By Ms. PRAMESTHI Elisabet Anggun (Indonesian Agency for Meteorology, Climatology and Geophysics, Indonesia S-Course)

FROM LIFE LESSONS TO CREATING NEW VISIONS

My hometown is standing astride on the active fault, and I experienced a big earthquake in Yogyakarta in 2006, which made my older sister and my grandparents have passed away. I felt very deep sadness in The Great Hanshin-Awaji Earthquake Memorial Disaster Reduction and Human Renovation Institution because the documentary video that was shown had the same story as I had when I lost my older sister. In the first photo, I can feel how it feels to lose your beloved family due to the earthquake. From all these study trips, I was able to get a lot of lessons learned including: If our house is located in a high seismicity zone, we need to improve building infrastructure. The E-Defense site visit made me think that it is important to test the strength of the building to give consideration to determine the design and structure materials for building a good earthquake-resistant building. Building codes also have an important role as a reference for the community to build earthquake-resistant houses.

The Nojima Fault Preservation Museum gives the best example of preserving an active fault for education and observation (the second photo). If the active fault wasn't preserved in the museum, it would be difficult for our next generation to learn about the fault and the devasting earthquake history would be forgotten. This museum is very important and useful for future generations. Let us continue to learn from

the past events, honor those we've lost, and strengthen our communities to face the future with courage and unity.





The Nojima Fault

By Mr. SETYAHAGI Akbar Rian (Indonesian Agency for Meteorology, Climatology and Geophysics, Indonesia T-Course)

On the third day, November 21, 2024, we visited the Hiromura Embankment, a historical structure built by Hamaguchi Goryo to protect the area from future tsunamis. Next, we visited the Inamura-no-Hi no Yakata Tsunami Education Center in honor of Hamaguchi Goryo. There, we learned about his contributions, and tsunami simulation models, and watched videos about tsunami mitigation and the history of tsunamis around the world. After that, we explored the Tsunami and Storm Surge Disaster Prevention Station in Osaka, where we learned about the significant risks posed by tsunamis and typhoons in the region. This experience highlights the critical need for effective mitigation strategies, especially focused on tsunami mitigation for the Osaka area, which is partially a reclaimed land area.



Tsunami and Storm Surge Disaster Prevention Station



Bronze statue of Hamaguchi Goryo



Hiromura Embankment

By Mr. KURBANOV Meylis (The Scientific Research Institute of Seismic Resistance Construction, Turkmenistan Strengthening Seismic Disaster Risk Reduction Countermeasures for Critical Buildings Course)

About Akashi-Kaikyo Bridge:

The study trip to the Akashi-Kaikyo Bridge left an unforgettable impression on me due to the scale of this engineering structure. Known as the longest suspension bridge in the world until 2022, it not only impresses with its architecture but also reveals many interesting facts about engineering, science, and technology. During the study trip, we learned how the bridge was built despite challenging natural conditions such as high winds and earthquakes. Special attention was paid to its earthquake resistance, as the structure was designed to withstand powerful earthquakes such as the 1995 Kobe earthquake. In addition, the view from the bridge is stunning and comprehensive. It provides an opportunity to see how engineering excellence harmonizes with natural beauty. Such a study trip inspired me to reflect on the power of human thought and reminded me that bold and ambitious projects are not only a matter of technology but also of hard work, cooperation, and faith in success.

About Expo 2025 Osaka, Kansai Construction Site:

A trip to the construction site of Expo 2025 Osaka, Kansai, certainly left a vivid impression on me. It is a great opportunity to see the preparations for one of the world's biggest events. Such a trip gives an opportunity to see how grand architectural and engineering structures are created, as well as to understand the scale and complexity of organizing an international exhibition. Visiting such a facility gave us the opportunity not only to see the technical and design solutions but also to evaluate how environmental and innovative aspects are taken into account during construction. Expo 2025 promises to be particularly interesting, as its main theme is "Designing Future Society for Our Lives" with a focus on sustainability, health, and technology.



At 2025 Osaka Kansai Expo construction site



2025 Osaka Kansai Expo construction site view

By Ms. YUCELT KUYUCUKLU Merve (Istanbul Metropolitan Municipality, Türkiye Strengthening Seismic Disaster Risk Reduction Countermeasures for Critical Buildings Course)

The part of the trip that affected me the most was the visit to the Akashi-Kaikyo Bridge and the Great Hanshin-Awaji Earthquake Memorial Disaster Reduction and Human Renovation Institution. As someone who is fascinated by bridges and a civil engineer who completed their graduation project on steel structures, visiting this bridge was an incredible experience. I had the opportunity to closely examine all the steel details, learn technical specifics from someone who knew everything about the bridge, and receive clear answers to all my questions. Additionally, climbing to the top of the bridge and observing both the structure and the city reminded me of how fortunate I was to be part of this program.

Being able to study some of the most intricate and technically advanced structures in the world, asking any question that came to mind, and learning from experts was invaluable. As a civil engineer who has never been to Japan and works on earthquake-related projects, I feel that seeing firsthand all the steps taken in Japan regarding disaster preparedness has broadened my professional perspective. I believe it has provided me with a new viewpoint on disaster management, particularly concerning the actions to be taken before, during, and after an earthquake and what needs to be done moving forward.

This trip was incredibly impactful in terms of equipping me with the knowledge and skills necessary to take more effective steps in preventing loss of life in the event of future earthquakes in my home country, which has experienced significant seismic activity. As a civil engineer living in Istanbul, where a major earthquake is expected, and having lost relatives in the February 6, 2023 earthquakes, seeing the lessons learned from Japan's experience with earthquakes was extremely moving. The museums created for both the public and technical personnel to keep the memory of past disasters alive left a lasting impression on me.

I would like to extend my sincere gratitude to everyone who contributed to organizing this trip, particularly JICA and BRI, for offering us such valuable insights and new perspectives.



View from the top of the Akashi Kaikyo Bridge's

By Mr. VAN DE VELDE BLANDÓN Germán José (National Autonomous University of Nicaragua, Nicaragua E Course)

Personally, I enjoyed every place I visited on this trip. I had heard about some of my co-workers' experiences from past years, but I never imagined mine could be like that. Each place had special significance. The museums documented the past experiences of the Japanese people, which is essential because it helps keep their memories alive. Hearing explanations from survivors was very moving—I could feel their emotions. The other places were important too. The Akashi Kaikyo Bridge is a significant structure. Through this visit, I gained an understanding of its structural design, the dynamic behavior of the structure, and the seismic behavior of the soil during the Kobe Earthquake. At the Nojima Fault Preservation Museum, we saw with our own eyes the movement of the soil and the damage caused. Other key sites included the E-Defense and E-Isolation laboratories, which I had never seen before. True learning occurs when you combine two situations: laboratory settings and real-life experiences. On the last day, we visited the Horyuji and Todaiji temples, two important wooden structures of global significance.

Additionally, I enjoyed seeing the large Buddha monument. I believe this trip was essential for the E-course, and now I better understand and appreciate the importance of our studies. We must work to ensure the safety of structures to protect human life. I want to express my gratitude for giving us this opportunity.







(the oldest wooden building in the world)



Lectures on Disaster Management Policy by National Graduate Institute for Policy Studies By IISEE

As One-Year Training Course held at the International Institute of Seismology and Earthquake Engineering (IISEE) is cooperating with the National Graduate Institute for Policy Studies (GRIPS), it is possible to obtain a Master's degree (Master of Disaster Management).

Training participants attended lectures on disaster management policy conducted by GRIPS from November 1st to 15th.

In those lectures, GRIPS professors and other researchers from outside gave lectures on disaster management policies related to architecture, cities, infrastructure, etc., as well as damage caused by past disasters and recovery and reconstruction.

In addition, as part of the site visit, they observed urban redevelopment projects and disaster prevention efforts in the Tokyo Station area, Azabudai, and Nakano districts in Tokyo.

They also made presentations and discussions about disasters in their country, disaster management policies, and their own relationship to disaster prevention, which was an opportunity for IISEE and ICHARM participants to deepen their knowledge of disaster prevention in their countries.

National Graduate Institute for Policy Studies (GRIPS) web: https://www.grips.ac.jp/en/

Training for BMKG Staff on Earthquake Early Warnings By Takumi Hayashida, Senior Research Scientist

On November 25th, 30 staff members from the Indonesian Meteorology, Climatology, and Geophysics Agency (BMKG) visited BRI. The Asian Disaster Reduction Center (ADRC) has provided training for BMKG staff on Earthquake Early Warning between November and December, and I was in charge of the lecture "The Effect of Surface Geology on Ground Motion". It was a short time, but I'm glad it was a fulfilling learning opportunity for the participants. One of the participants was a former IISEE training participant, and he enjoyed visiting BRI again and meeting IISEE staff after a long time.

IISEE Seminar by ISC Director

By Takumi Hayashida, Senior Research Scientist

On December 3, Dr. Dmitry Storchak, Director of the International Seismological Centre (ISC) in the UK, visited BRI. Dr. Storchak was in Japan for a stay at the National Institute of Polar Research. He presented

"The Main and Supplementary Data Products of the International Seismological Centre" to the annual course participants at the IISEE seminar. Over 40 former IISEE training participants also joined the seminar online, making it a valuable opportunity for exchanging opinions.

This seminar was planned due to Dr. Storchak's visit to the IISEE exhibition booth at the 18th WCEE (see Newsletter No. 223). The seminar was a very beneficial opportunity to learn about the history and work of the ISC. We would like to express our sincere gratitude to Dr. Storchak for taking the time to visit us in Tsukuba during his busy business schedule.



Dr. Storchak and BRI President Dr. Sawachi





☐ Contact Us

The IISEE Newsletter is intended to act as a go-between for IISEE and exparticipants.

We encourage you to contribute a report and an article to this newsletter. Please let us know your current activities in your countries.

We also welcome your co-workers and friends to register our mailing list.

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IISEE-UNESCO Lecture Note

Earthquakes

Reports of Recent Earthquakes Catalog of Damaging Earthquakes in the World Earthquake Catalog