

# **IISEE Newsletter**



Aug 30, 2024 Number<mark>223</mark>

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# The Interim Meeting of the Individual Study

#### By Dr. Tatsuhiko Hara, Chief Research Scientist, IISEE

On June 27, the interim meeting of the individual study for the Seismology and Tsunami disaster mitigation courses was held on June 27th at the IISEE hall in the hybrid format. Each student presented the result and remaining tasks. Some supervisors and Dr. Tsuji were also in attendance. The meeting ended successfully. The next milestone is the submission of the master's thesis on July 29.

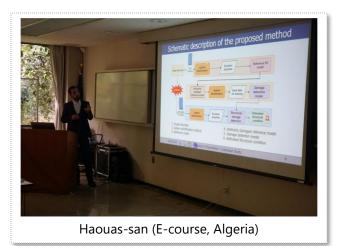


Anthony-san (S-course, El Salvador)



#### By Dr. Mai Ito, Senior Research Engineer, IISEE

On June 24, interim presentations were held at the IISEE hall for the Earthquake Engineering course. 6 participants presented the progress of their master's report research. Participants who are conducting individual studies at distant universities gave their presentations online. They will continue to work vigorously to complete their master's reports.





#### Final Presentation held on August 1st and 2nd By Dr. Yushiro Fujii, Director of IISEE

The final presentations for the individual study of the 2023-2024 Regular Course were held over two days from August 1.

The final presentations were held jointly by the three courses: Seismology, Earthquake Engineering, and Tsunami Disaster Mitigation, where the participants presented the results of their research in their master reports.

We are very pleased that all 13 participants were able to join on-site. We would also like to thank the supervisors from outside BRI who were able to participate online.

We had excellent presentations and lively discussions on both days, making for very productive final presentation sessions. I would like to take this opportunity to thank all of the supervisors, advisors, and staff for their cooperation.

By the time this newsletter is published, I believe all the master reports and synopses will have been completed. To all participants, we are very close to the goal. Please take good care of yourselves and work hard until the end.





Fajar-san (T-course, Indonesia)

#### Ex-Participants Reunited Prof. Satake in Chile By IISEE

A training course on tsunami early warning systems, the pacific tsunami warning center (PTWC) enhanced products, tsunami evacuation planning, and tsunami ready recognition organized by UNESCO-Intergovernmental Oceanographic Commission (IOC) International Tsunami Information Center (ITIC) and Hydrographic and Oceanographic Service Chilean Navy (SHOA), was held in Valparaiso, Chile over 12 days from August 19 to 30. Three ex-participants, Mr. Joji Sakaraia MALODALI (Fiji, 2022-23 Tsunami Disaster Mitigation Course), Mr. HARVAN Muhammad (Indonesia, 2022-23 Tsunami Disaster Mitigation Course), and Mr. Darcy Luuga Naivins CHAN KUM TONG (Samoa, 2022 Global Seismological Observation Course), participated in the training and met Prof. Satake (Professor Emeritus, Earthquake Research Institute, University of Tokyo), the president of the IISEE training and dissemination conference, who was also participating as a lecturer.

The training was attended by 35 participants, 12 from Chile and 23 from other countries.



(left to right) Joji-san, Prof. Satake, Harvan-san



(left to right) Joji-san, Vins-san, Harvan-san

#### Research Paper by Sidiq-san was Published in a Scientific Journal By Dr. Bunichiro Shibazaki, Senior Fellow, IISEE

IISEE Sidiq-san (Indonesian Agency for Meteorology, Climatology, and Geophysics (BMKG), 2021-2022 Tcourse participant) and his team published their research on the 1996 Biak, Indonesia tsunami in Earth, Planets and Space. Title of their paper is: "Solving the puzzle of the 1996 Biak, Indonesia tsunami."

This study was developed based on Sidiq's master's report.

https://link.springer.com/article/10.1186/s40623-024-02041-4

#### Training Program for Dominican Republic By IISEE

On June 26 (Wed.) and 27 (Thu.), 8 members of a Dominican Republic-based organization for seismic diagnosis and retrofitting of buildings visited the Building Research Institute.

They received lectures on methods of seismic diagnosis and retrofitting of buildings in Japan, as well as knowledge of methods related to seismic damage assessment, emergency safety evaluation, and post-earthquake damage evaluation.



# Research Paper by Dr. Kita was Published in a Scientific Journal

By Dr. Saeko Kita, Senior Research Scientist, IISEE

A stress drop is one of important parameters to express earthquake source information, which is used for strong motion prediction. A research paper for examination of stress drops of intraslab earthquakes in northeastern Japan by Dr. Kita was published in one of scientific journals (Earth, Planets and Space) on April 23 (Kita et al., 2024; published on June 11). In the paper, the authors show 1) Stress drops of intraslab earthquakes in oceanic mantle was larger than those in oceanic crust. 2) Stress drops of intraslab

earthquakes in Hokkaido was larger than those in Tohoku. The paper can be accessed free of charge at the link below. Please read it if you are interested.

https://earth-planets-space.springeropen.com/articles/10.1186/s40623-024-02032-5

#### 18th World Conference on Earthquake Engineering By Dr. Moeko Matoba, Research Engineer, IISEE

The 18th World Conference on Earthquake Engineering (WCEE) was held in Milano, Italy, from the 1st to the 5th of July. WCEE, which IAEE has held once every four years since 1956, is the most historical and largest international earthquake engineering conference. There were over 4,250 participants from 82 countries to show their research and have a discussion. To present BRI research and introduce the IISEE training course, Dr. Nakagawa, Dr. Hayashida, Dr. M. Ito, Dr. Watanabe, Dr. Otsuka, Dr. E. Ito, Dr. Azuhata, and I, who are staffs of IISEE, participated the conference. Other participants of BRI were Dr. Oki and Dr. Yagi from the Department of Production Engineering, Dr. Nakamura from the Department of Structural Engineering, and Dr. Tsuchimoto from the Department of Building Materials and Components.

We also opened an exhibition booth to introduce the IISEE training course and provide information about how to join it. Many participants visited us, and some visitors, especially from Latin America and South Asia, commented that they were very interested in the new short-term course, which we will start in the following Autumn. Moreover, we could see a lot of former IISEE participants again at our booth. On the night of the 3rd of July, we had the IISEE alumni meeting at a local restaurant near the venue. Many former participants, IISEE lecturers, and researchers from BRI assembled, and eventually, 38 persons joined it. We could renew an old friendship and were glad former IISEE participants actively worked as researchers or engineers in their fields.

The next conference, 19WCEE, will be held in Montreal, Canada, from the 1st to the 6th of October, 2028. We are looking forward to meeting you!

- < Presentation titles of IISEE staff (only as first author) >
- Dr. Nakagawa: Influence of Weight of Shear Box on Soil-Structure System in Centrifuge Model Test
- Dr. Hayashida: Development of Vs30 Maps Using Microtremors in Bhutan
- Dr. M. Ito: Evaluation of Dynamic Performance of Isolated Structures Based on Strong Motion Observation
- Dr. Otsuka: Statistical Analysis Using the IISEE Masonry Database: Part 1. Probability Density and Analyzing Data

- Dr. Azuhata: Statistical Analysis Using the IISEE Masonry Database: Part 2. Development of Restoring Force Model

- Dr. E. Ito: Application of EMR method to retrieve the velocity structures in the Amatrice area, central Ital

- Dr. Oki: Seismic Performance of Partition Walls Subjected to Story Drift and Inertial Force

- Dr. Yagi: Experimental Study on Evaluating Damage to Interior and Exterior Walls, with a Focus on Visibility

- Dr. Nakamura: Seismic Performance of Multi-story Reinforced Concrete Wall with a New Opening at 1st Floor

- Dr. Tsuchimoto: Trial seismic design for 10-story timber construction in high seismic country Japan



Opening Ceremony of 18WCEE



IISEE Alumni Meeting

#### (Short Report) Tsukuba Chibikko Hakase 2024 By IISEE

As part of the "Tsukuba Chibikko Hakase 2024" facility tour for elementary and junior high school students, about 80 students attended an experimental lecture at IISEE on Wednesday, July 24, titled "Let's Learn How Buildings Shake!



# 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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https://iisee.kenken.go.jp/en/

### **Back Numbers**

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## **IISEE Net and Training**

Synopsis Database Bulletin Database IISEE E-learning IISEENET IISEE-UNESCO Lecture Note

### Earthquakes

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

