

「JSCE-PII-MCA Joint Seminar (Online) - Recent Advances and Practices of Concrete Materials, Structures, and Constructions in Indonesia, Japan, and Mongolia -」

The Joint Seminar of JSCE, PII (the Institution of Engineers Indonesia – PERSATUAN INSINYUR INDONESIA), and MCA (Mongolian Concrete Association) was held on March 2nd and 3rd, 2021. In the past several years, joint seminars between JSCE and PII, and JSCE and MCA, were held in Indonesia and Mongolia, respectively. This joint seminar has been the first tripartite seminar of the three countries and also the first online one organized by our committee. ITS (Sepuluh Nopember Institute of Technology), fib-Indonesia, and MACE (Mongolia Association of Civil Engineers) were the co-organizers. Zoom was mainly used for the speakers' presentation, while listeners could participate either by Zoom or watch the live video from YouTube. The presenters and their presentation titles of this seminar are shown in Table-1.

The title of the joint seminar is *Recent Advances and Practices of Concrete Materials, Structures, and Constructions in Indonesia, Japan, and Mongolia*. It was determined according to the current conditions and demand of the industries in the field of cement, concrete, and constructions after discussing with researchers and engineers from Indonesia and Mongolia. At present, both Indonesia and Mongolia are achieving faster economic growth, leading to high demands for infrastructure development. It is highly valuable and helpful that JSCE could share the experience and recent advances in Japan with our counterparts of Indonesia and Mongolia in the fields of concrete materials, structures, and constructions. In addition, it is also important for Japanese researchers and engineers to learn about the recent advances and practices in Indonesia and Mongolia for the sake of further improvement of technologies and international communications in Japan. We hope that the technical communication and cooperation of Japan, Indonesia, and Mongolia can be strengthened and improved through this joint seminar.

In the seminar, five presenters from Japan, three speakers from Indonesia, and one speaker from Mongolia, made their presentations. Prof. Nakamura, Nagoya University, introduced the health report of JSCE for the infrastructures in Japan and the work of taking actions to get understanding and cooperation of citizens. Mr. Kobayashi, Shimizu Corporation, is currently working in the construction project of a hydraulic power plant in Asahan Regency, Indonesia. He introduced the outline of the project as well as the technologies and management during the construction. Dr. Luan, Saitama University, introduced his current research on the hydration and chloride binding properties of slag blended cement. Dr. Sagawa, Kyusyu University, introduced the recent guidelines and technical recommendations in Japan relating to the utilization of mineral admixtures, such as blast furnace slag powder and sand, fly ash, and copper sand. Mr. Torichigai, Kajima Corporation, introduced a dam construction project in Japan involving the application of fly ash blended cement concrete. Dr. Fadhilah, Universitas Indonesia, introduced her current research on the influence of reinforcement spacers on concrete durability and microstructure. Prof. Han, Diponegoro University, introduced the experimental reinforcement technique of concrete structures using FRP and its application in Indonesia. Dr. Ekaputri from ITS introduced the combination of microbes, fly ash and bottom ash for high volume coal ash concrete. Dr. Batmunkh Narantuya from MUST introduced the current utilization of low-quality recycled aggregates in concrete in Mongolia.

The joint seminar gained a lot of attentions from Japan, Indonesia, and Mongolia. More than 450 listeners from universities, institutes, and construction companies attended the seminar via Zoom in the two days. Some others watched the live videos from YouTube. The listeners expressed great interest in the presented topics. In the Q&A session, they asked a lot of questions ranging from material compositions, practical construction work, quality

control, and durability. The presenters had a warm discussion with the listeners. It can be said that the joint seminar is successful. More and deeper technical communications are expected in the future.

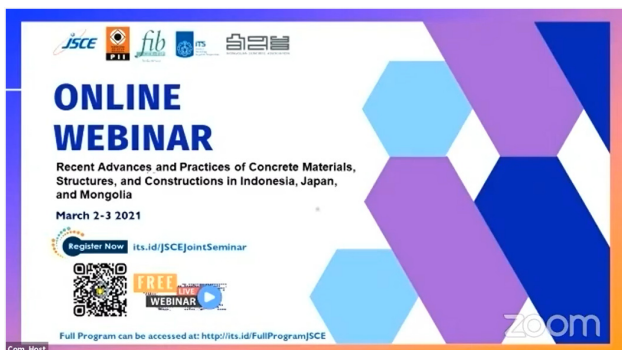


Photo-1 Zoom online webinar

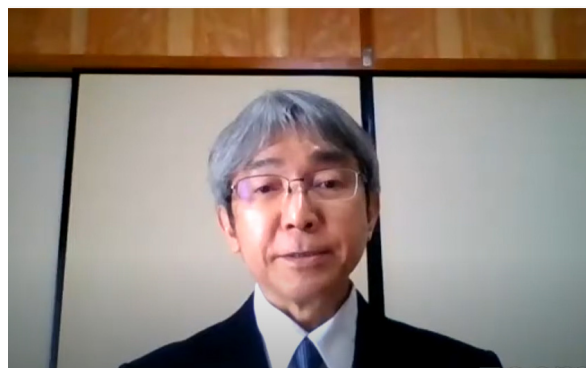


Photo-2 Prof. Hamada is addressing opening remarks



Photo-3 Prof. Nakamura is presenting

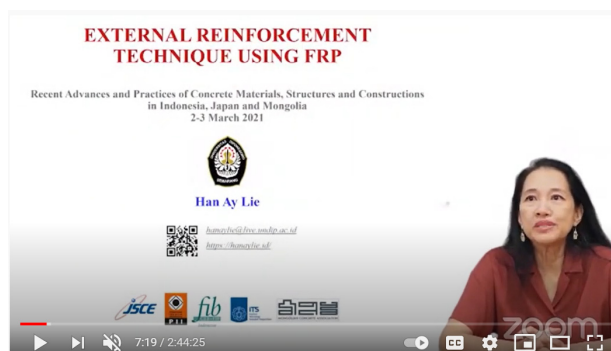


Photo-4 Prof. Han is presenting

Table-1 Speakers and their presentation titles

Presentation	Speaker
Infrastructure Health Report of JSCE -Action to get understanding and cooperation of citizen-	Prof. Hikaru Nakamura, Nagoya University, Japan
Influence of reinforcement spacers on concrete durability and microstructure	Dr. Fadhilah Muslim, fib-Indonesia & Universitas Indonesia, Indonesia
Construction project of a hydraulic power plant in Asahan Regency, Indonesia	Mr. Toshimitsu Kobayashi, Shimizu Corp., Japan
Utilization of low-quality recycled aggregates in concrete	Dr. Batmunkh Narantuya, Mongolian University of Science and Technology, Mongolia
Hydration and chloride binding properties of blast furnace slag blended cement	Dr. Yao Luan, Saitama University, Japan
External reinforcement technique using FRP	Prof. Han Ay Lie, Diponegoro University, Indonesia
Recent guidelines and technical recommendations of mineral admixtures in Japan	Dr. Yasutaka Sagawa, Kyusyu University, Japan
Combination of Microbes, fly ash and bottom ash for High Volume Coal ash Concrete	Dr. Januarti Jaya Ekaputri, Sepuluh Nopember Institute of Technology, Indonesia
Application of fly ash cement to concrete structures in Japan -Dam construction case-	Mr. Takeshi Torichigai, Kajima Corp., Japan