

7th JSCE Concrete Committee Webinars - Frontiers of Concrete Technology (FCT)

3D Concrete Printing

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The Concrete Committee of the Japan Society of Civil Engineers (JSCE) has started the international webinar series “Frontiers of Concrete Technology” (FCT) from 2021. It is intended to hold the webinar 2 or 3 times a year. The seminar aims to convey Japan’s cutting-edge research in concrete technology to the world. A theme is set for each seminar, and one Japanese researcher and one overseas researcher working on the theme are invited to deliver the lectures. The seminars provide time for a panel discussion, in which the overall history, the present status, and the future direction of that field of research are discussed.

This seminar was the seventh and held on August 17th, 2024. The theme was “3D Concrete Printing”. The invited speakers were Professor Viktor Mechtcherine from TUD Dresden University of Technology, Germany, and Professor Minoru Kunieda from Gifu University, Japan. Both are distinguished researchers worldwide in the field of 3D concrete printing.



3D Concrete Printing

Invited researchers



Prof. Viktor Mechtcherine
TUD Dresden University of
Technology
Germany



Prof. Minoru Kunieda
Gifu University
Japan

zoom

Date: August 7th 2024
Time: 16:00-18:00 (JST/UTC+9:00)

Participation fee: Free

Registration: <https://forms.gle/aMN8k5GaPYdHTR56>

* After registration, you will receive an e-mail with the URL (Zoom) of the webinar.

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Concrete Committee, Japan Society of Civil Engineers (JSCE)
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Seminar Flyer

The seminars can be watched on the JSCE YouTube channel:

<https://www.youtube.com/watch?v=r6avMOKZNGI>

The number of participants in the seminar was about 130. As it was a webinar, there were participants from throughout the world, mainly from South Asia, Thailand, Indonesia, and Philippines. The seminars can be viewed on the JSCE YouTube channel. In the seminar, Prof. Mechtcherine introduced the current state of 3D concrete printing for fabricating concrete structures, such as bridges and buildings, in Germany. He also presented the methodology of 3D concrete printing construction on-site, covering not only material development but also the buildability of printed structures with ready-mixed concrete. Prof. Kunieda introduced the several applications of 3D concrete printing and their feasibility studies for the constructions and mechanical performance evaluations including future prospective. His presentation included Japan's efforts to strongly progress this technology and publication plans of the 3D concrete printing. In the panel discussion, various ideas, and directions for the application of 3D concrete printing in the construction field were discussed.

The report of the past seminars is below.

First & Second Seminar

http://www.jsce.or.jp/committee/concrete/e/newsletter/newsletter63/Newsletter63_files/FCT.pdf

Third Seminar

https://www.jsce.or.jp/committee/concrete/e/newsletter/newsletter65/index_files/data/report.pdf

Fourth Seminar

https://www.jsce.or.jp/committee/concrete/e/newsletter/newsletter67/index_files/FCT_JointSeminar/4th_FCT_Report.pdf

Fifth Seminar

https://www.jsce.or.jp/committee/concrete/e/newsletter/newsletter68/Newsletter68_files/FCT_JointSeminar/5th_FCT_Report.pdf

Sixth Seminar

https://www.jsce.or.jp/committee/concrete/e/newsletter/newsletter71/Newsletter%2071_files/Newsletter_6th_FCT_report.pdf

YouTube channel.

First seminar: <https://www.youtube.com/watch?v=IP65Dudd6tk>

Second seminar: <https://www.youtube.com/watch?v=ArU-x-oyGig>

Third seminar: <https://www.youtube.com/watch?v=hwfl7mrs7-I>

Fourth seminar: <https://www.youtube.com/watch?v=SLrs46PqG7Y&t=3s>

Fifth seminar: <https://www.youtube.com/watch?v=68gB1UYJrPA>

Sixth seminar: <https://www.youtube.com/watch?v=O9SjBacieXg>