Dear ALL

We are pleased to invite you to the **CEE Distinguished Speaker Series 2026** by Professor Takeshi KATSUMI from Kyoto University, Japan on 10 March 2026 (Tue) 2pm at CEE Seminar Room A.

Please register via the link or QR code below. Thank you.

**CEE Distinguished Speaker Series 2026**

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| **Speaker** | **:** | **Professor Takeshi KATSUMI from Kyoto University, Japan** |
| **Topic** | **:** | **Marginal Soils – Recent Challenges in Environmental Geotechnics** |
| Date | : | 10 March 2026 (Tuesday) |
| Time | : | 2:00 PM – 3:00 PM |
| Venue | : | CEE Seminar Room A (N1-B1b-06) Map |
| Host | : | Associate Professor FEI Xunchang |
| Registration | : | Please click here to register |

NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE | College of Engineering

# CEE Distinguished Speaker Series 2026

**Professor Takeshi KATSUMI**
Graduate School of Global Environmental Studies, Kyoto University, Japan

## *Marginal Soils – Recent Challenges in Environmental Geotechnics*

Date : 10 March 2026 (Tuesday)
Time : 2:00 PM to 3:00 PM
Venue : CEE Seminar Room A (N1-B1b-06)
Host : Associate Professor FEI Xunchang

### *Abstract*

Recent challenges on the utilization of "marginal soils" in Japan will be described in this presentation. Marginal soils in this presentation include excavated soils generated from construction works, geogenically contaminated soils, soil-waste mixtures and nuclide contaminated soils generated through the catastrophic disaster. Governmental initiatives which have contributed to the proper management and use of excavated soils for the decades are reviewed. Countermeasures against soils and rocks with geogenic contamination are summarized with a short historical review on the regulations, in which the leaching and sorption behavior considering the several phenomena such as permeation, reduction-oxidation reaction, etc. are considered. Management of soil-waste mixtures has attracted attention, particularly for the use of the soils recovered from the large quantity of disaster debris/wastes generated from the catastrophic natural disasters. The separation efficiency to recover the soils by removing the waste fractions is influenced by the basic properties of the base soils, which contributed to the optimized design of the separation system. Management of the nuclide-contaminated soils generated from 2011 disaster (Fukushima nuclear accident) requires further research and technological developments regarding characterization, design, construction, and maintenance for the use of the soils with low-level contamination. Such contaminated soils shaved from the ground surface to reduce the radiation in the environment exhibit the featured fundamental properties in terms of geotechnical engineering as well as the nuclide containment, both of which are required to be properly addressed.

### *Biography*

Dr Takeshi KATSUMI has been a Professor at the Graduate School of Global Environmental Studies (GSGES), Kyoto University, Japan, since 2009, and served as the Dean of GSGES from April 2020 to March 2024. He obtained his doctorate degree in 1997 from the same university. He has made research contributions in various topics of environmental geotechnics, including waste landfills, management of contaminated sites, reuse of by-products in geotechnical applications, geogenic contaminations, and environmental geotechnics for disaster recovery. Professor KATSUMI has received numerous academic awards as a result of his scholarly work, including Best Paper Awards from Japan Society for Civil Engineers (JSCE) (twice), Best Paper Awards from the Japanese Geotechnical Society (JGS) (three times), and "JSPS PRIZE" by the Japan Society for the Promotion of Science (JSPS PRIZE is annually awarded to about 25 Japanese researchers younger than 45 from all the academic fields). He has been a member of ISSMGE Technical Committee No.215 on Environmental Geotechnics for more than 20 years, acted as the Vice President of JGS in 2022-2024, and is currently the Vice President of JSCE.

**Presented by**
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Regards, School of Civil and Environmental Engineering

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