



**Japanese
Geotechnical
Society**

JGS-HKGES Joint Workshop on Geotechnical Engineering 2025



Co-sponsored by JGS TC101 and HKGES
JGS Headquarters, Tokyo, Japan

22 Dec 2025

PART 1

Chair: Satoshi Nishimura, Hokkaido University

- 9:00 Welcome by Ryosuke Uzuoka, the President of JGS
- 9:10-9:30 **Behaviour of thermo-active diaphragm wall**
Anthony Leung, The Hong Kong University of Science and Technology
- 9:30-9:50 **Field Application of Distributed Fiber Optic Sensing for Levee**
Hirotohi Mori, Yamaguchi University
- 9:50-10:10 **Landslide hazard mitigation**
Clarence Choi, The University of Hong Kong
- 10:10-10:30 **Laboratory tests on unsaturated soils: insights from CFD simulations**
Mai Sawada, Institute of Science Tokyo
- 10:30-10:50 Coffee break

PART 2

Chair: Anthony Leung, The Hong Kong University of Science and Technology

- 10:50-11:10 **Variability of saprolitic soils and its influence on geotechnical performance**
Andy Leung, The Hong Kong Polytechnic University
- 11:10-11:30 **Integrated investigation of submarine landslide-generated tsunamis in Toyama Bay based on field Surveys, laboratory experiment, and numerical analysis**
Hiromasa Iwai, Kyoto University
- 11:30-11:50 **Multiphysics modelling of large deformation problems**
Chao Zhou, The Hong Kong Polytechnic University
- 11:50-12:10 **Recent laboratory techniques on unsaturated soil: from sand to clay**
Hailong Wang, The University of Tokyo
- 12:10-13:10 Lunch break: Discussion on International Collaboration between Japan and Hong Kong
Satoshi Nishimura, Hokkaido University, and Toshifumi Mukunoki, Kumamoto University

PART 3

Chair: Masahide Otsubo, Port and Airport Research Institute

- 13:10-13:30 **A story of digital transformation in geotechnical engineering: development, achievement and lessons learnt**
Ryan Yan, AECOM
- 13:30-13:50 **KAJIMA Innovation & Incubation**
Kenichi Kawano, Kajima Corporation
- 13:50-14:10 **An innovative double wall earth retaining system for the construction of the APM/BHS Tunnel**
Gavin Toh, Lambeth
- 14:10-14:30 **Effective use of dredged clays in coastal development in Japan**
Yoichi Watabe, Hokkaido University
- 14:30-14:50 Coffee break

PART 4

Chair: Chao Zhou, The Hong Kong Polytechnic University

- 14:50-15:10 **Enhancing the Performance of Friction Piles by Post-grouting**
Alvin Lam, Arup
- 15:10-15:30 **A New Failure Mechanism of Breakwaters under Combined Seismic and Tsunami Effects**
Masahide Otsubo, Port and Airport Research Institute
- 15:30-15:50 **Landslide Risk Management and Natural Terrain Hazard Mitigation in Hong Kong**
Chris CW Chan, GEO/CEDD The Hong Kong SAR
- 15:50-16:10 **Introduction of Certification System of Professional Engineers for Geotechnical Evaluation in Japan**
Junichi Koseki, President of Japanese Association for Geotechnical Evaluation, former President of JGS
- 16:30-17:00 Discussion
- 17:00 Closing by Anthony Leung, the President of HKGES

ORGANISERS



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Mai Sawada, Institute of Science Tokyo
Hirofumi Toyota, Nagaoka University of Technology
Yukio Nakata, Yamaguchi University
Yukika Miyashita, Public Work Research Institute
Satoshi Yamashita, Kitami Institute of Technology
Yoichi Watabe, Hokkaido University

Behaviour of thermo-active diaphragm wall

Energy diaphragm walls are a form of energy geostructure that have been demonstrated to have high heat exchange efficiency. The thermomechanical behaviour of energy walls subjected to thermal cycles has been studied mainly through numerical modelling over the past decade, yet quality data are severely lacking to validate the models to further understand the soil-wall interaction. In this presentation, results of recent centrifuge model tests that studied the thermally induced structural responses of an energy cantilever wall embedded in a uniform sand bed of different densities will be presented. More new understandings of the soil-wall thermomechanical interactions will be derived through the findings of finite-element back-analysis. Finally, some new insights into the practical design of energy wall will be discussed.



Dr Anthony Kwan Leung

**Hong Kong University of Science and
Technology
President of HKGES**

Dr Leung is a Professor in the Civil and Environmental Engineering and the Director of the Geotechnical Centrifuge Facility at the HKUST. His research interests focus on developing smart and innovative engineering solutions to address sustainability issues in energy and the environment for civil engineering applications. Prof. Leung has published more than 160 journal articles. He is the awardee of the best paper award from Geotechnique in 2022, Canadian Geotechnical Journal in 2022, and Computers and Geotechnics in 2023. He was also awarded 2022 Outstanding Young Geotechnical Engineer Award of the ISSMGE and 2019 Bright Spark Lecture Award of the ISSMGE. He is currently the President of the Hong Kong Geotechnical Society (HKGES) and the General Secretary of the TC106 (Unsaturated Soils) and TC107 (Tropical& Residual Soils).

Field Application of Distributed Fiber Optic Sensing for Levee Monitoring

River levees play a crucial role in protecting communities from flooding, yet their stability is increasingly challenged by extreme hydrological events and long-term degradation. Traditional monitoring techniques, such as point sensors and periodic visual inspections, provide only limited information and often fail to capture the subtle, spatially distributed deformations that can precede catastrophic failure. To address this limitation, this study investigates the application of Rayleigh backscattering-based distributed fiber optic sensing (DFOS) to levee monitoring. In an actual levee in Japan, fiber-optic cables were installed longitudinally along the levee axis in a straight line, enabling continuous measurements of strain distribution over long distances. This deployment represents one of the first documented field applications focused on detecting longitudinal deformation patterns in levees using DFOS. Long-term monitoring confirmed that the system achieves a very low noise floor, on the order of microstrains, which allows the detection of small but critical deformations. These findings demonstrate the potential of DFOS as a reliable and sensitive tool for early warning and risk assessment of levee failure.



Dr Hirotoshi Mori
Yamaguchi University

Hirotoshi Mori was born in Kyoto, Japan. He received his B.Eng. degree in Civil Engineering from Kyoto University in March 1997 and his M.Eng. degree in Environmental Earth Engineering from the Graduate School of Engineering, Kyoto University, in March 1999. He later earned an M.Sc. in Engineering from the University of Cambridge in January 2009, and a Ph.D. in Engineering from the University of Tokyo in July 2010. Dr. Mori began his career at the Ministry of Construction (now the Ministry of Land, Infrastructure, Transport and Tourism, MLIT) in April 1999. He served in various capacities at the Public Works Research Institute, the Water and Disaster Management Bureau, the Policy Bureau, and the National Institute for Land and Infrastructure Management. Since October 2016, he has been an Associate Professor at Yamaguchi University. His research focuses on geotechnical engineering, particularly on river levees, subsurface cavities, and sinkholes.

Landslide hazard mitigation

Landslides cause significant damage to infrastructure and deaths each year. With changing climate variables and urbanisation, the threat of landslide will only increase. Among the different landslide types, debris flows are the most dangerous. They are mixtures of soil, water and boulders that surge downslope under the influence of gravity. To mitigate debris flows, we must improve our understanding on the use and design of engineered- and nature- inspired solutions. This talk will showcase the experimental and numerical work carried out at the University of Hong Kong to improve urban resilience against debris flow hazards.



Ir Dr Clarence Choi

**The University of Hong Kong
General Secretary of HKGES**

Clarence Choi is Associate Professor of Civil Engineering at the University of Hong Kong. His research interests are on landslides and ground improvement. He serves as the Secretary General of the Hong Kong Geotechnical Society.

Laboratory tests on unsaturated soils: insights from CFD simulations

This study presents pore-scale hydromechanics behind water retention tests on granular materials using multiphase CFD (computational fluid dynamics) analysis. Hysteretic water retention curves (WRCs) of single pores and sphere packing models were numerically simulated and the pore geometry effects on drying and wetting were analysed. The force balance in the system reveals the role of the angle between the fluid–fluid interface and the vertical direction during the air entry. Furthermore, laboratory tests for measuring fluid-particle contact angles, a key factor of WRCs, were simulated and the accuracy of test results was appraised. The simulation results provide additional insights into element-scale laboratory test data and uncertainties in test methods from a pore-scale perspective.



Dr Mai Sawada

Institute of Science Tokyo

Dr. Mai Sawada received her PhD from Kyoto University in 2016. She studied laboratory tests on unsaturated soils and their application to the preservation of historic sites damaged by natural disasters. Following the completion of her PhD, she spent six years as an assistant professor at Kyoto University. In 2022, she joined the Institute of Science Tokyo (formerly, Tokyo Institute of Technology) as an associate professor. Her research group focuses on the macro- and microscale hydromechanics of unsaturated soils, utilising laboratory tests and numerical simulations.

Variability of saprolitic soils and its influence on geotechnical performance

Extensive datasets of field and laboratory test results of various soil types in Hong Kong are available in an online repository system maintained by the government. This presentation focuses on analyses of field standard penetration test (SPT) and laboratory triaxial test results of completely decomposed granite (CDG) in Hong Kong. The soil variability features revealed by these tests are reported, including those of shear strength parameters, critical state model parameters and three-dimensional spatial variability patterns based on SPT-N values. The impacts of such variability and potentials of data-enhanced geotechnical design for both ultimate and serviceability limit states will be discussed.



Dr Andy Leung

**The Hong Kong Polytechnic University
Immediate Past President of HKGES**

Dr. Andy Leung is currently Associate Head (Partnership) and Associate Professor at the Department of Civil and Environmental Engineering, The Hong Kong Polytechnic University. He graduated from The University of Hong Kong (BEng) and University of California, Berkeley (MS), before he obtained PhD degree at the University of Cambridge. His research interests include soil-structure interaction, reliability of geotechnical and structural systems, probabilistic analysis approaches and novel geotechnical instrumentation technologies. He served as the President of Hong Kong Geotechnical Society from 2022 – 2024.



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Integrated investigation of submarine landslide-generated tsunamis in Toyama Bay based on field Surveys, laboratory experiment, and numerical analysis

The 2024 Noto Peninsula Earthquake (Mw 7.6) generated unexpectedly early tsunamis in Toyama Bay, where the first wave was recorded only three minutes after the main shock. Bathymetric surveys and underwater drone observations revealed large submarine landslide scars near the coastal slope, suggesting earthquake-induced slope failures as the trigger. This lecture presents integrated field observations, laboratory experiments, and numerical simulations to clarify the mechanism of landslide-generated tsunamis. Physical model tests reproduced submarine slope failures and showed that the initial water drawdown and subsequent wave amplitude are closely related to the landslide's acceleration and mass. Coupled DEM-SPH simulations further demonstrated the critical role of solid-fluid interaction in wave generation. The findings highlight that the kinematic behavior of sliding masses governs tsunami characteristics and emphasize the importance of high-resolution seafloor monitoring for assessing submarine slope stability and tsunami hazards in enclosed seas such as Toyama Bay.



Dr Hiromasa Iwai

Kyoto University

Dr. Hiromasa Iwai is an Associate Professor at Graduate School of Engineering, Kyoto University. He earned his Ph.D. in Engineering from Kyoto University and previously served as Assistant Professor at Nagoya Institute of Technology. His research focuses on soil mechanics, landslide dynamics, and submarine geohazards, including gas-hydrate bearing sediments and coupled THMC processes. As a Japanese member of ISSMGE Technical Committees TC101 (Laboratory Testing) and TC308 (Energy Geotechnics), he contributes to advancing experimental and numerical studies for understanding and mitigating geotechnical hazards in both onshore and offshore environments

Multiphysics modelling of large deformation problems

The material point method (MPM) provides an effective approach for analysing large-deformation problems, such as landslides, which often involve unsaturated soils. Although several MPM formulations for unsaturated soils have been reported in the literature, they generally do not adequately account for multiphysics coupling. For instance, soil water retention capacity and permeability functions are typically treated as independent of soil deformation. Most studies assume isothermal conditions, even though friction-induced heating within the shear band can significantly influence the behaviour of both saturated and unsaturated soils. To address these problems, a thermo-hydro-mechanical coupled MPM formulation has been developed based on the two-phase two-point framework. It will be introduced in this presentation.



Dr Chao Zhou

The Hong Kong Polytechnic University

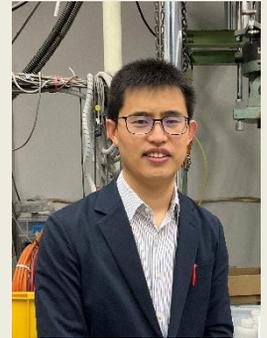
Dr Chao Zhou is an Associate Professor in the Department of Civil and Environmental Engineering at The Hong Kong Polytechnic University. Dr Zhou's research interests include the fundamental thermo-hydro-mechanical behaviour of unsaturated soils and soil-structure interfaces, constitutive modelling of soils and interfaces, climate change adaptation of slopes and pavements, and energy structures. So far, Dr Zhou has published over 130 SCI papers in international journals. He has received a number of prestigious awards, such as the State Natural Science Award by the State Council of China. He is currently associate editor of the Canadian Geotechnical Journal and Vadose Zone Journal.



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Recent laboratory techniques on unsaturated soil: from sand to clay

This presentation introduces a series of recently developed laboratory systems for characterizing the hydro-mechanical behavior of unsaturated soils, ranging from sand to bentonite. First, a newly designed triaxial testing system for evaluating the liquefaction potential of unsaturated sands will be presented briefly. The system incorporates an inner cell for improved volumetric measurement accuracy, a membrane filter enabling faster suction equilibration, and a control system capable of maintaining constant total mean principal stress during cyclic loading. Second, a permeameter for unsaturated sandy soils will be introduced, designed to measure permeability efficiently and accurately under various suction conditions. Finally, the presentation will highlight techniques for measuring the swelling pressure of unsaturated bentonite, integrated with an X-ray diffractometer to observe water adsorption behavior in the interlayer space of montmorillonite. In this method, the specimen thickness was reduced to 2 mm to shorten the water diffusion path, enabling time-resolved observation of interlayer hydration.



Dr Hailong Wang

University of Tokyo

Dr. Wang received his Ph.D. from the University of Tokyo (UTokyo) in 2014 and currently serves as an Associate Professor at UTokyo. From 2015, he worked at OYO Corporation, a geotechnical consulting company, and later joined Waseda University in 2018, where he served until 2024. Dr. Wang's research focuses on geoenvironmental engineering, including the long-term hydro-mechanical behavior of bentonite used in high-level radioactive waste disposal systems, the utilization of CO₂ sequestration materials for ground improvement, ground liquefaction, and technological developments related to shield tunneling. His research is characterized by the development of novel laboratory testing techniques, particularly for unsaturated soils.

A story of digital transformation in geotechnical engineering: development, achievement and lessons learnt

Digital transformation has become a central theme across all professional disciplines, and geotechnical engineering is no exception. This presentation outlines the digital journey undertaken by the geotechnical team at AECOM's Hong Kong office. Key developments in digital tools will be showcased, with insights into the challenges faced and benefits gained throughout the process. The talk will also explore future directions, including the integration of artificial intelligence, and how these innovations are shaping the evolution of geotechnical practice.



Ir Dr Ryan Yan

AECOM
Vice President of HKGES/Consultant

Ir Dr. Ryan Yan is currently an Executive Director at AECOM Asia Company Limited. Prior to joining AECOM, he has been working in academia in Macau, Hong Kong and New Zealand, holding different teaching and research positions. He has over 28 years of experience in geotechnical engineering covering a wide spectrum of subject fields. He specialises in numerical modelling of soil-structure interaction problems, soil, rock and ground characterisation, sustainable geotechnics and application of novel digital solutions to the project life cycle. Ryan is a chartered engineer in Hong Kong and New Zealand. He is also an Adjunct Professor at the Hong Kong University of Science and Technology and the Hong Kong Polytechnic University.



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KAJIMA Innovation & Incubation

In this presentation, Mr. Kawano from Kajima Corporation's Innovation and Incubation Office will introduce the company's unique strategy for open innovation within the construction industry. While many technology startups exist, their solutions often face scalability limitations on large, complex projects. To overcome this challenge, Kajima is creatively searching for mature and scalable technology solutions beyond the conventional construction tech ecosystem. He will highlight how Kajima identifies and adapts proven technologies from other industries to solve pressing issues in its large-scale infrastructure and geotechnical projects. This presentation will share insights into Kajima's approach, which accelerates the implementation of impactful solutions and drives the entire industry forward. He will discuss Kajima's vision for fostering a broader culture of innovation to meet the future demands of construction.



Mr Kenichi Kawano

Kajima Corporation

Kenichi Kawano is a geotechnical research engineer and Innovation Manager at Kajima Corporation. He holds master's degrees from the University of Tokyo and Imperial College London and is a licensed Professional Engineer in Japan and the USA. With a background as a dam and TBM engineer on major projects in Japan, he now focuses on integrating novel and cutting-edge global technologies into the construction industry.

An innovative double wall earth retaining system for the construction of the APM/BHS Tunnel

On the recently reclaimed land for the Hong Kong international airport third runway system, deep excavation has been carried out to construct tunnels connecting the terminals. A novel excavation and lateral support design comprising a double wall system connected by ties was introduced in one portion to cater for the challenging geotechnical condition with improved constructability at the site adjacent to the shoreline. The presentation will discuss the design development of the scheme, and the construction and performance of the system.



Ir Dr Gavin Toh Seng-Huat
Lambeth

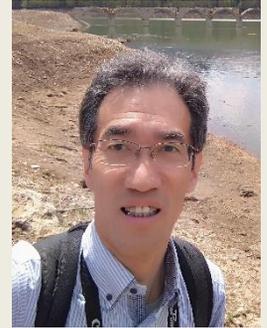
Ir Toh has over 30 years of experience in design and construction of foundation and underground geotechnical works. He is currently a Deputy General Manager of Lambeth Associates Ltd. Lambeth is an in-house engineering consultancy of Gammon, where he has worked for 28 years. He is currently responsible in managing the Foundation and Geotechnical Team to provide safe, economical, and innovative geotechnical engineering solutions for a variety of civil, railways, tunnels, and buildings projects in Hong Kong. He is actively serving in professional bodies such as HK Institution of Engineers (HKIE), and Institution of Civil Engineers (ICE). He is the Session 2023/24 Chairman of the Geotechnical Division of the HKIE. He is a Registered Geotechnical Engineer (RGE), and Registered Structural Engineer (RSE).



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Effective use of dredged clays in coastal development in Japan

In Japan, some manmade islands such as the Kansai International Airport were reclaimed with good quality sands and gravels for earth filling. However, many other manmade islands, such as Tokyo International Airport (Haneda Airport) and Kitakyushu Airport, and some zone of the Chubu Centrair International Airport as well, were reclaimed with poor quality dredged clays from port and navigation channel construction in the vicinity. This presentation will provide an overview of the latter cases with dredged clays. Technologies, technical challenges, and solutions that have been developed and applied in the construction of the manmade islands that make effective use of dredged clays, as experienced in Japan's coastal development. The technologies adopted in these projects were such as vertical drains (SD/PVD) with preload aiming to make an overconsolidated state, cement solidification (cement treated soils by Pneumatic Flow Mixing Method), and cement mixture with air-foam (Air-foam treated soils). In addition, some advanced management for quality control for the technologies are introduced as case studies.



Dr Yoichi Watabe

**Hokkaido University
Former Vice-President of JGS**

Professor Yoichi Watabe graduated in 1990 and obtained Doctor of Engineering in 1995 from Tokyo Institute of Technology. He has working experience at Port and Airport Research Institute, Japan, as a key member of Soil Mechanics Laboratory from 1995 to 2016. Then, he moved to Hokkaido University as a Professor of Division of Civil Engineering in 2016. From 1997 to 1999, he was also a Post-Doctoral Fellow at Laval University, Quebec, Canada. He has been invited many technical committees for Port and Airport construction projects under the Japanese ministry. His main research topics have been consistently on soft soil engineering. From 2010 to 2014, he was the international secretary of JGS and contributed to the organization of the 15th Asian Regional Conference of ISSMGE. He chaired ISSMGE-TC217 on "Land Reclamation" from 2015 to 2019, and currently, he chairs ISSMGE-TC214 on "Foundation Engineering for Difficult Soft Soil Conditions (Soft Soils)" since 2020.

Enhancing the Performance of Friction Piles by Post-grouting

The shaft-grouting technique for enhancing pile shaft friction was first introduced in Hong Kong during the 1990s. This innovative method has been particularly effective for large-diameter friction bored piles and friction barrettes, providing high-capacity foundation systems for sites with challenging conditions, such as weak saprolites and exceptionally deep bedrock. In recent years, its application has expanded to include small-diameter piles, such as friction mini-piles and friction pre-bored H-piles, especially in urban areas with limited access. Similarly, Tokyo, another densely populated city, frequently employs friction piles in its construction projects. The implementation of post-grouting operations has proven to substantially enhance the effectiveness of shaft grouting, leading to significant improvements in pile capacity.



Dr Alvin Lam

Arup

Dr. Alvin K M Lam is the Director of Geotechnics and the East Asia Skills Leader of Ground Engineering in Arup. He is also a Registered Geotechnical Engineer (RGE) in Hong Kong. Alvin has extensive experience in ground investigation, engineering study, pile study, foundation design, site formation design, slope assessment, deep basement excavation and site supervision for a variety of large-scale infrastructure and building projects in Hong Kong, South Korea and other East Asia regions. He is currently the Deputy Chairman of the AP/RSE/RGE Committee, the Honorary Secretary of the HKIE Geotechnical Division Committee, the member of the HKIE Geotechnical Discipline Advisory Panel and the member of the Buildings Department Geotechnical Engineers Registration Committee (GERC) Panel.



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A New Failure Mechanism of Breakwaters under Combined Seismic and Tsunami Effects

The 2024 Noto Peninsula earthquake caused severe damage to the eastern breakwater of Iida Port, which unusually tilted seaward rather than toward the port. To clarify this rare failure mode, centrifuge model tests (1/50 scale, under 50g) and element tests were conducted. The breakwater, founded on clayey soil, was examined under two scenarios: with and without seismic shaking prior to the tsunami. Without seismic shaking, the breakwater tilted toward the port; however, with seismic shaking, excess pore water pressure developed, leading to arc-slip failure consistent with field observations. Element tests further confirmed that cyclic shear induced by earthquake motion reduced the stiffness and strength of the foundation clayey soil, contributing to this unusual failure mechanism when struck by the tsunami.



Dr Masahide Otsubo

Port and Airport Research Institute

Dr. Otsubo is a Senior Researcher at Port and Airport Research Institute (PARI), Japan since 2024. He previously worked at Public Works Research Institute (PWRI) and The University of Tokyo. He received his Ph.D. from Imperial College London, M.Eng. from The University of Tokyo, and B.E. from Kyushu Institute of Technology. His research focuses on particulate soil mechanics and granular dynamics, including elastic wave propagation and soil liquefaction, through advanced element testing, physical modelling, and discrete element method (DEM) simulation.

Landslide Risk Management and Natural Terrain Hazard Mitigation in Hong Kong

Hong Kong manages landslide risks through a multi-pronged strategy led by the Geotechnical Engineering Office (GEO) of the Civil Engineering and Development Department (CEDD) of the Government of the Hong Kong Special Administrative Region. The Government's systematic approach involves upgrading substandard slopes, implementing mitigation measures in vulnerable natural hillside catchments, and setting safety standards for new developments. In particular, the GEO have adopted three major strategies, including strengthening our slopes continuously, enhancing Government's emergency response capacity and improving community resilience against extreme rainstorms, to cope with the increasing landslide risks arising from climate change. The presentation introduces the latest strategies adopted by the GEO in managing landslide risks with highlights on the approach in the mitigation of natural terrain hazard in Hong Kong.



Ir Chris CW Chan

GEO/CEDD

The Hong Kong Special Administrative Region

Mr Chris CHAN is a civil and geotechnical engineer with over 24 years experience. He is now a senior geotechnical engineer in the Geotechnical Engineering Office (GEO) of the Civil Engineering and Development Department (CEDD) of the Government of the Hong Kong Special Administrative Region. After joining the CEDD in 2009, he has been actively involved in the planning, investigation, design and construction of landslip prevention and mitigation works as well as the geotechnical control of development projects. Mr CHAN was leading an in-house team for the preparation of designs and the associated technical development of landslip prevention and mitigation works between 2022 and 2023. Since 2024, he is working in the Geotechnical Projects Division of the GEO, responsible for providing ad-hoc geotechnical advisory services for Government departments and planning of cavern development projects in Hong Kong.



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Introduction of Certification System of Professional Engineers for Geotechnical Evaluation in Japan

After the 2011 Off the Pacific Coast of Tohoku Earthquake in Japan, which induced extensive liquefaction and severe embankment failure, causing serious damage not only to public infrastructures but also to private residential areas, the Japanese Geotechnical Society (JGS) compiled a series of recommendations, in which an establishment of a certification system of professional engineers for geotechnical evaluation, in particular on private properties, was proposed. In view of such social backgrounds, the Japanese Association for Geotechnical Evaluation (JAGE) was assembled and started its operation in 2013. The history, scopes and activities of JAGE that has been co-operated by four organizations including JGS, with a support of other six organizations are briefly introduced. The total number of registered professional engineers who have passed official examinations increased gradually year by year and reached 1,341 as of Feb, 2025. They spread nationwide and are in charge of a variety of duties that are relevant to geotechnical evaluation in general, including forensic issues.



Dr Junichi Koseki

**President of Japanese Association for
Geotechnical Evaluation
Former President of JGS**

Dr. Junichi Koseki is a Professor Emeritus of the University of Tokyo (UTokyo) and currently serving as a technical officer at R&D center of Raito Kogyo, Co., Ltd., Japan. He obtained his Bachelor, Master and Doctoral degrees from UTokyo, Japan. During the period of 1987-1994, he worked as a researcher at Public Works Research Institute, Ministry of Construction, Japan. In 1994, he moved to UTokyo as an associate professor at Institute of Industrial Science (IIS). After promotion to a professor at IIS in 2003, he moved to Department of Civil Engineering, UTokyo in 2014 and served as a professor of Geotechnical Engineering Laboratory until March, 2023. His research interests include liquefaction and its countermeasures, deformation and strength properties of geomaterials, and seismic behavior of earth structures. He received the C.A. Hogentogler Award from Committee D-18 on Soil and Rock, ASTM in 2000 and 2004, the Best Paper Awards from the Japanese Geotechnical Society in 2007, 2009, 2010, 2012, 2016, 2020, 2021 and 2025 and the Best Paper Award from Japan Society of Civil Engineers in 2023. He was also the 2010-2011 Mercer Lecturer endorsed jointly by the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) and the International Geosynthetics Society and the fifth Bishop Lecturer endorsed in 2019 by TC101 of ISSMGE on laboratory stress strain strength testing of geomaterials.