## Under the auspices of JTC2, FedIGS

Organised by



Geotechnical Society of Singapore

## Supported by

ISSMGE TC309 on Machine Learning and Big Data ISSMGE TC304 on Engineering Practice of Risk Assessment & Management ISSMGE TC217 on Land Reclamation ISSMGE TC210 on Embankment Dams

4th International Conference on Information Technology in Geo-Engineering

5th International Workshop on Modern Trends in Geomechanics

24-26 Nov 2021 Furama Riverfront, Singapore

## Conference themes for 4ICITG •

The 4th ICITG aims to address the latest developments in applications of information technologies and artificial intelligence to geo-engineering. Topics of the conference cover any topics related to the applications of information technologies in geotechnical engineering, geo-environmental engineering, or engineering geology. These include, but not limited to, the following topics:

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- · Sensors and sensing technologies for geotechnical or geological applications
- New geotechnical instrumentations, data collection and transmission technologies
- 3D geological modeling
- Application of Artificial intelligence (AI) or machine learning in geotechnical engineering
- Use of Information and Communications Technologies (ICT) in laboratory and field works
- · Digitalisation for site investigation, in-situ or laboratory testing
- Data driven geophysical investigation and interpretation methods
- Big data and database processing for better use of geotechnical data for geotechnical design
- Applications of imaging technologies for geotechnical design or geological data presentations
- Building Information Modeling (BIM) applied to geo-structures and underground constructions
- · Virtual reality and augmented reality
- · Intelligent geomaterials, geosynthetics and geosystems
- · Case studies in design, constructions and maintenance

There will also be mini-symposiums or workshops related to the above topics. Proposals of special sessions or workshops may be sent to the conference chairs. 4ICITG and 5IWMTG will share opening, closing, some keynote sessions and all the other activities planned for the conferences.

For the conference, only extended abstract needs to be submitted for the consideration for oral presentation. Selected papers will be invited for submissions to special issues in Acta Geotechnica and Georisk.

Important Dates Special Session Proposal Abstract for Conference / Special Journal Issues Confirmation of Acceptance of Abstract Submission of Full Paper / Extended Abstract

Organizing Committee All members are based

in Singapore

# <u>Chairs</u>

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For more information, please contact : Geotechnical Society of Singapore 22 Sin Ming Lane #03-85 Midview City Singapore 573969 Email I contactus@4ITICG.org Website I www.4ITICG.org

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# About ICITG

The International Conference on Information Technology in Geo-Engineering (ICITG) was initiated by the Joint Technical Committee 2 (JTC2) of the Federation of International Geo-Engineering Societies (FedIGS). FedIGS is an umbrella organization linking international professional societies in the field of "Geo-Engineering", including ISSMGE International Society for Soil Mechanics and Geotechnical Engineering, ISRM International Society for Rock Mechanics and Rock Engineering, IAEG International Association for Engineering Geology and the Environment, IGS International Geosynthetics Society. JTC2 is one committee under FedIGS and focuses on intelligentizing geo-engineering data.

The conference intends to bring together engineers, scientists, researchers and educators to review new developments and IT advances in geo-engineering and provide a forum for the discussion of future trends. The first three ICITG conferences were organized by Tongji University, Shanghai, China in 2010, Durham University, Durham, UK together with Tongji University, Shanghai, China in 2014, and the University of Minho and the Portuguese Geotechnical Society in Portugal in 2019, respectively. The 4th ICITG will be organized by the Geotechnical Society of Singapore, with the support of Nanyang Technological University and National University of Singapore in 2021.

## About IWMTG

The International Workshop on Modern Trends in Geomechanics (IWMTG) has been successfully held in Vienna (2005), Stanford (2010), Nottingham (2012) and Assisi, Italy (2016). The format of IWMTG will follow the

established workshop tradition in which presentations are given by invited leading experts in the field of geomechanics only.

For more information, please contact : **Geotechnical Society of Singapore** 22 Sin Ming Lane #03-85 Midview City Singapore 573969 Email | contactus@4ITICG.org Website | www.4ICITG.org

## **International Organizers** for IWMTG

Ronaldo I. BORJA Stanford University, USA WU Wei Universität für Bodenkultur Wien (BOKU), Austria YU Hai-Sui University of Leeds, UK

#### **International Advisorv Committee for 4ICITG**

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