

# The 4<sup>th</sup> Workshop on Geology of Singapore

NUSS Kent Ridge Guild House, 19 May 2014 (Monday),  
8.30 am to 5.00 pm

## Workshop Details:

NUSS Kent Ridge Guild House  
19 May 2014 (Monday), 8.30 am to 5.00 pm  
**PDU: 5 / STU: 3**

## Organised by:

Society for  
Rock  
Mechanics &  
Engineering  
Geology  
(Singapore)



Geotechnical  
Society of  
Singapore



## Speakers:



Prof. Louis Wong



Dr. Cai Jun Gang

## Course Synopsis

This workshop is organised for the 4th time in response to the favourable feedback in 2010, 2011 & 2012. It aims to present and discuss systematically the geology of Singapore, as the Singapore Geological Map has been recently updated from the old version published in 1976. The Economic Strategies Committee (ESC) of Singapore recently recommended the development of underground space over the next decade as the Government continues to find ways around the problem of space limitations in land-scarce Singapore. With an increasing demand of deep excavation, tunnelling and development of underground rock cavern space in Singapore, it is important for regulators, planners, developers, engineers and contractors to have a more comprehensive understanding of Singapore geology, the use of updated Singapore Geological Map and the planning for geologic investigations. This workshop brings together experts and practitioners from Singapore to share their knowledge and experience.

## Programme

Time	Presentation	Speaker
0830	Registration	
0900	Welcome by Dr. Cai Jun Gang	
0910	Fundamentals of Geology — Plate Tectonics, Geologic Time Scale, Minerals vs. Rocks, Rock Cycle, Weathering vs. Erosion, Geological Structures	Prof. Louis Wong
1030	Tea break	
1100	Geology & Updated Singapore Geological Map — Geological Setting, Features of Geological Formations, Rock Weathering, Geological History	Dr. Cai Jun Gang
1230	Lunch	
1345	Proper use of the geological map and some new findings on Singapore geology	Prof. Louis Wong
1500	Tea break	
1530	Planning and Rock Investigations for Rock Cavern Development, Layout of Boreholes & Geophysical Lines, Need for Various Means of Rock Investigations, Need for Field & Lab Tests, Rock Investigation Practice in Singapore	Dr. Cai Jun Gang
1630	Q&A	

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## Registration Form

<b>Title:</b> *Prof / Dr / Mr / Mrs / Mdm / Ms <b>Full name:</b> (underline Surname / Family name)		<b>Membership No.:</b>
<b>Organisation:</b>		
<b>Mailing Address:</b>		
<b>Telephone:</b>	<b>Mobile:</b>	<b>Fax:</b>
<b>Email:</b>		

**SRMEG/GeoSS members:** \$240.00 per person       **Non-Members:** \$290.00 per person

*Registration is on a first-come-first serve basis. All registrations must be accompanied by cheque payment or credit card number before the course commences. No cancellation or refund is allowed upon registration, only a replacement of name.*

### Method of Payment

By Bank Draft / Cheque in Singapore dollars drawn on a bank in Singapore and made payable to:  
**"Society for Rock Mechanics & Engineering Geology"**

Issuing Bank : \_\_\_\_\_ Bank Draft / Cheque Number : \_\_\_\_\_

By Credit Card. Please deduct the above amount from my: \***VISA / MASTER / AMEX** (select one)  
Card number: \_\_\_\_\_ Expiry Date (MM/YY): \_\_\_\_\_

Please select one (1) option only, if required:

Invoice       Receipt

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Please send Registration Form and Payment to:**

SRMEG Secretariat

1 Liang Seah Street, #02-11 Liang Seah Place, Singapore 189022

Phone: +65 6336 2328 | Fax: +65 6336 2583 | Email: [srmeg@cma.sg](mailto:srmeg@cma.sg) | Website: [www.srmeg.org.sg](http://www.srmeg.org.sg)

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## Speakers' Profiles



**Prof. Louis Wong** is an Assistant Professor at NTU. He holds a BSc degree in Earth Sciences (HKU) and a PhD degree in Geotechnical and Geoenvironmental Engineering (MIT). He had worked as a consulting tunnel engineer in the USA and had served the Geotechnical Engineering Office of the Hong Kong Government. The academic pursuits of Prof. Wong are fundamental and applied research of engineering geology and rock mechanics. He has authored and co-authored more than 80 journal and conference publications. *He is an editorial member of the Journal Rock Mechanics and Rock Engineering (Springer), Journal Engineering Geology (Elsevier) and Bulletin of Engineering Geology and the Environment (Springer) and three other technical journals.* He is the Hon. Secretary in the Society of Rock Mechanics and Engineering Geology (Singapore), and a Committee member of the ASCE Geo-Institute Rock Mechanics Committee. He is a Singapore Accreditation Council (SAC) Technical Assessor for the field of Site Investigation. Prof. Wong is a winner of the Nanyang Education Award (2013), which recognizes his quality in preparation and organization, specialist knowledge, enthusiasm for the course, delivery and effectiveness based on both student and peer reviews in the School of Civil and Environmental Engineering at NTU.



**Dr Cai Jun Gang** is currently an Executive Director of Trittech Group Ltd. He has been involved in most rock investigation and underground rock cavern projects in Singapore, such as rock cavern development in Jurong Formation, underground ammunition facilities, underground science city at Kent Ridge, and Jurong oil storage rock caverns (JRC) at Jurong Island. Dr Cai obtained MEng and PhD in Geotechnical Engineering from NTU of Singapore. He has over 25 years of practical experience in engineering geology, rock engineering & geotechnical engineering R&D, consultancy and project management, and has published more than 100 technical papers in scientific journals and conference proceedings. He is also the project director of Sintef-Trittech-Multiconsult Consortium for project management and technical review of the on going Jurong Rock Cavern (JRC), and Underground Rock Cavern (URC) Usage Feasibility Study. Dr Cai is the Vice-President of the Society for Rock Mechanics & Engineering Geology (Singapore). He is a National Research Foundation (NRF) technical reviewer, Singapore Accreditation Council (SAC) subcommittee member and technical assessor.