Singapore

Name: Tunnelling and Underground Construction Society (Singapore) (TUCSS)

Type of Structure: non profit, open association

Number of Members: 1222 members, 115 corporate members



ASSOCIATION ACTIVITIES DURING 2019 AND TO DATE

In 2019, TUCSS continued to promote tunnelling and underground construction through organising monthly evening seminars, training courses, Conference & site visits for dissemination of tunnelling & underground related information and best practices, as well as conducting social networking events to bring together the practitioners from the different sectors of the industry. TUCSS continued to support the accreditation of tunnelling resident site supervisory staff during the year.

Monthly Evening Seminars for members:

17 Jan 19 - Construction of Road Tunnels in Iceland Hedinsfjardargong Project Mr. Ermin Stehlik, MCC Singapore

20 Feb 19 - Management of Tunnel Construction within Europe using Innovative Solutions Mr. Diwakar Velu, Land Transport Authority

20 Mar 19 - Design and Construction for Deep Shafts in Rock and Soil using Vertical Tunnel Boring Machines, from VSM to SBR

Mr. Hannes Lagger, Arup London

18 Apr **19** - Rational and Efficient Design of Cement - Treated Soil Systems for

Underground Construction
Dr. Lee Fook Hou, National University of
Singapore

16 May 19 - Tunnelling beneath Piled Foundations, A Study from the UK Dr. Michael Williamson, Mott MacDonald Singapore

20 Jun 19 - Glass Fiber Reinforced Polymer (GFRP) Rock- Bolts used as Temporary and Permanent Reinforced in Mined Caverns

Mr. Pierre Hofmann, Dextra Group

18 Jul 19 - Challenges in Wuhan Sanyang Road Tunnel Project, Wuhan, China Mr. Li Hong, STEC Singapore/Shanghai

15 Aug 19 - Tunnelling with Macro Synthetic Fibre Reinforced Concrete

Dr. Ing. Ralf Winterberg, Barchip Inc.

21 Nov 19 -Alternative Tunnel System for a 8.5km long Road Tunnel through the Himalayas

Mr. Florian Krenn, Geoconsult India

Annual Lecture

TUCSS Annual Lecture was held on Thursday, 17 October 2019 at NTUC Auditorium. The topic was "From Small Diameter Pipe Jacking to Super Large Diameters at High Pressure – Developments in Mechanised Tunnelling" by Dipl. - Ing. Werner Burger. The Annual Lecture was attended by 310 TUCSS members.

Hulme Prize

- TUCSS Hulme prize was held on 19th September 2019, at SMU Auditorium. 3 papers were shortlisted out of 6 submitted papers:
- Application of Ground Freezing for Mined Tunnel in T226 Marina Bay Station Ivan Sim Zhan Rui, Land Transport Authority
- Productivity Analysis of Diaphragm
 Wall Construction in Jurong
 Formation Mark Smith, Land Transport
 Authority
- Undercrossing Live Tunnels in Parallel below the Water Table in an Urban Environment Diwakar Velu, Land Transport Authority

Training Courses

TUCSS held the "TUCSS Short Course on Design & Construction of Tunnels & Underground Structures" on 4 & 5 April 2019 at Orchard Hotel. It was well attended by 220 participants.

SICAT 2019 Symposium

TUCSS held "Symposium on Innovations & Challenges in Asian Tunnelling 2019" on Thursday & Friday, 5 & 6 September 2019, at Raffles City Convention Centre. It was attended by a total of 300 participants with 16 prominent experts sharing their knowledge and experience.

Annual Dinner

TUCSS Annual Dinner was held on 6 September 2019 at Raffles City Convention Centre. The Dinner was attended by 750 guests and members.

Golf Challenge

TUCSS organised 2 golf tournaments in 2019:

- 26 April 2019 at Singapore Island Country Club
- 26 September 2019 at Sentosa Golf Club

TUCSS Site Visit

- TUCSS held Technical Site Visit to T311 Bedok South Station Site & Tunnels on 4 May 2019. It was attended by a total of 20 TUCSS members.
- TUCSS held Technical Site Visit to DTSS2 Design and Construction of Sewer Tunnels for the Deep Tunnel Sewerage System Phrase 2 – Contract T-11 on 21 September 2019. It was attended by 20 TUCSS members.

