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AUDIMAX

– JOINT WORKSHOP –

MECHANIZED TUNNELING IN SOFT GROUND

SEPTEMBER 12TH, 2020

KUALA LUMPUR, MALAYSIA

SPECIAL DISCUSSION MEETING

Chairmen: Prof. Adam Bezuïjen, University Ghent;

Dr. Britta Schöber, Ruhr University Bochum;

Dr. Daniela Garroux G. de Oliveira, Tunnelsoft

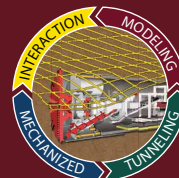
RUHR UNIVERSITY BOCHUM

SFB 837 - Interaction Modeling in Mechanized Tunneling

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SFB 837

Interaction Modeling in
Mechanized Tunneling



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MECHANIZED TUNNELING IN SOFT GROUND

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Since 2011, the SFB 837 has established a continuous collaboration „Recent Advances in Tunneling and Underground Space Research“ with various international academic partners. Among other research institutions, this includes the IKC Cambridge, UK; the Tongji University Shanghai, China; the ACTUE-Group, Austria; the Colorado School of Mines, USA; the Sapienza University of Rome, Italy and the University of Cork, Ireland.

In 2016, 2018 and 2019, a workshop has been organized by SFB 837 combined with the Technical Committee 204 “Underground Construction in Soft Ground” of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) the weekend before the World Tunneling Congresses in San Francisco (USA), Dubai (UAE) and Naples (ITALY). This workshop is the 4th in that line and will be held at the Impiana Hotel, 13 Jalan Pinang, 50450 Kuala Lumpur on Saturday, 12th of September, prior to the WTC 2020 venue.

The workshop is organized by Prof. Dr. Adam Bezuijen, Ghent University, Belgium/Deltares, the Netherlands, Dr.-Ing. Britta Schößler, SFB 837 sub-project manager, Ruhr University Bochum, Germany and Dr. Daniela Garroux G. de Oliveira, Tunnelsoft, Germany.

SEPTEMBER 12TH, 2020 – 10:00 - 16:30

- 10:00 *Opening and General Overview*
- 10:10 **Pressure Distribution at the Tunnel Face and Mixing Chamber of EPB TBM during Drilling and Standstill**
Adam Bezuijen
Ghent University, Belgium
- 10:30 **The Klang Valley MRT Project – Line 2 in Kuala Lumpur**
Gusztáv Klados
MMC Gamuda KVMRT (T) Sdn Bhd, Kuala Lumpur, Malaysia
- 11:00 **High Density Support Medium (HDSM) for Face Support in Demanding Ground**
Britta Schößler
Ruhr-Universität Bochum, Germany
- 11:20 *Coffee Break*

SEPTEMBER 12TH, 2020 – 10:00 - 16:30

- 11:40 **Application of Computational Flow Simulation for Predicting Pressure Distribution in EBP Pressure Chambers**
Günther Meschke
Ruhr-Universität Bochum, Germany
- 12:00 **Study on Shield Operation Method in Soft Ground by Shield Simulation**
Mitsutaka Sugimoto
Nagaoka University of Technology, Japan
- 12:30 **Environmental Aspects of Mechanized Tunnel Excavation**
Diego Sebastiani
Sapienza University of Rome, Italy
- 13:00 *Lunch*
- 14:00 **The Interaction between TBM and Ground in Complex Weathered Rock Profiles**
Nick Shirlaw
Golder Associates, China
- 14:20 **Advances in Excavation Management for Slurry TBMs**
Jerome Ruben Duhme
Herrrenknecht, Asia/ MIT, USA
- 14:40 **Recent Research in NUS on TBM Tunnelling in Spatially Variable Soil**
Pan Yutao
National University of Singapore, Singapore
- 15:00 *Coffee Break*
- 15:20 **Real Time Excavation Management System for EPBM using Muck Wagons**
Diwakar Velu
LTA Singapore, Singapore/ Politecnico di Torino, Italy
- 15:50 **Predictive Models in TBM Tunnelling using Machine Learning**
Kathrin Glab
TU Delft, The Netherlands
- 16:20 *Closing remarks*