

Minutes for 34th ISSMGE TC304 Meeting (ESREL 2019)

Time: 2pm, Sep 23, 2019

Venue: Room F335, Main Building, Welfenschloss

Chairman: Jianye Ching

Attendees: Marcin Chwala (guest), Mohammadsadegh Fardahi, Mikhail Kholmyansky, Hyunki Kim, Mika Knuuti (guest), Kok-Kwang Phoon, Wojciech Pula (guest), Takayuki Shuku (guest), and Marco Uzielli

Meeting began at 205pm.

1. Approval of the 33rd TC304 minutes (ICASP 13)

Minutes were approved.

Attendees introduce themselves.

Jianye stated the ISSMGE TC membership policy and encouraged attendees to join TC304 as formal or corresponding members.

2. About ESREL 2019

- 29th European Safety and Reliability Conference (ESREL 2019), Hannover, Germany, Sep 22-26 2019 (Michael Beer & Enrico Zio)
 - <https://esrel2019.org/#/>
 - TC304 session (KK Phoon and Jianye Ching)
 - 7 presentations
 - TC304/TC309 Student Contest (Giovanna Vessia & Wojciech Pula)
 - 8 groups of students will present their works in ESREL 2019
 - Jianye mentioned that because the quality of the works is good, 4 awards are given, including the first place award, the second place award, and two encouragement awards.
 - First place award
 - Cong Miao, Luyu Ju, and Shuo Zheng from Wuhan University (China) “Bayesian Approach for Soil Stratification Using Reversible Jump Markov Chain Monte Carlo”
 - Second place award
 - Y. Tsuda and M. Kagehira from Okayama University (Japan) “Stratigraphic Profiling using Sparse Modeling”
 - Encouragement awards
 - M.S. Farhadi from Tampere University (Finland) “An Integrated Optimization-Game Theory Model for CPT-based Subground Stratification”
 - J. Rainer and H. Szabowicz from Wroslaw University of Science and Technology (Poland) “Analysis of underground stratification based on CPTu profiles using high-pass spatial filter”
 - Keynote by KK Phoon on “Managing uncertain ground truth using Bayesian machine learning”
 - Jianye thanked Professors Michael Beer, Matteo Broggi, Jasper Behrendorf, and Julian Salomon for supporting TC304 events in ESREL 2019, especially for their

helps in preparing the venue for TC304/TC309 Student Contest as well as the food and drink during the event free of charge. Jianye also thanked Giovanna Vessia and Wojciech Pula for their significant efforts in organizing the TC304/TC309 Student Contest.

3. Future Activities

3.1 Conferences & workshops

- 16th Asian Regional Conference (16ARC) on Soil Mechanics and Geotechnical Engineering, Oct 14-18 2019, Taipei, Taiwan (Chair: Chang-Yu Ou)
 - <http://www.16arc.org>
 - TC304 session on “Geotechnical risk/reliability and data analysis” (JP Wang & J Ching)
 - 9 presentations
 - Keynote (J Ching & KK Phoon)

- International Symposium for Geotechnical Safety & Risk (ISGSR 2019), Dec 11-13 2019, Taipei, Taiwan (Chair: J Ching; Vice Chair: Dianqing; Secretary: Jie Zhang)
 - <http://www.isgsr2019.org/>
 - ~145 final full papers have been received; ~160 presentations
 - Wilson Tang Lecture, Suzanne Lacasse Lecture
 - Six keynotes and three ISSMGE Bright Spark lecturers
 - Short courses
 - Risk Assessment in Geotechnical Engineering (DV Griffiths)
 - Bayesian method and tools for geotechnical practice (Timo Schweckendiek & Yu Wang)
 - Geotechnical reliability-based design examples to improve partial factor design methods (BK Low & KK Phoon)
 - Special session honoring late Prof. TH Wu (KK Phoon and Hsein Juang)
 - 12 presentations
 - A Georisk special issue will be published to honor late Prof. TH Wu

- 16th International Conference of the International Association for Computer Methods and Advances in Geomechanics (IACMAG 2020), Jul 1-4 2020, Torino, Italy
 - www.iacmag2020.org
 - Key dates
 - Full paper due: December 15, 2019
 - TC304 session (MS8) on “Probabilistic site characterization and data analytics” (Jianye Ching, Yu Wang, and Kok-Kwang Phoon)
 - 8 submissions

- 7th International Symposium on Reliability Engineering and Risk Management (ISRERM 2020), June 5-8 2020, Beijing, China
 - <http://www.isrerm2020.com>
 - Important dates:
 - Abstract due date: Oct 20 2019
 - Full paper due: Dec 31 2019
 - Sessions organized by TC304 members
 - 01. Uncertainty Quantification and Analysis for Industry 4.0 (Kok-Kwang Phoon, Michael Beer)
 - 07. Data Analytics for Geotechnical Engineering (Jie Zhang, Wei Guo)

- 08. Real World Uncertainty Quantification and Data-driven Decision Making (Kok-Kwang Phoon, Zhaohui Chen, Pengfei Wei)
 - 13. Advances in Reliability-based Design: Theory and Applications (Zi-Jun Cao, Jian Ji, Wen-Ping Gong)
- 7th Asian-Pacific Symposium on Structural Reliability and its Applications (APSSRA2020), Oct 4-7 2020, Tokyo, Japan (Ikumasa Yoshida & Shin-ichi Nishimura)
 - <http://risk.arch.t.u-tokyo.ac.jp/APSSRA2020/index.html>
 - Important Dates
 - Nov 15 2019 Abstract submission due
 - Apr 15 2020 Full paper submission due
 - June 15 2020 Notification of acceptance
 - TC304 Suzanne Lacasse Lecture
 - Sessions related to TC304
 - Machine Learning for Civil Engineering (M. Kohiyama, S. Wu, WenGang Zhang, Takayuki Shuku)
 - Current Trend on Statistical Methods for Engineering Analyses (M. Beer, B.U. Park, K.K. Phoon, K. Zuev, M. Faes)
 - Risk Analysis and Management of Geotechnical Problem (Shin-ichi Nishimura, Lulu Zhang)
 - Probabilistic Site Characterization: Planning, Data Analytics and Value of Information (Yu Wang, Huei Wang, Shin-ichi Nishimura)
 - Probabilistic Methods and Reliability-based Design in Geotechnical Engineering (Jinhui Li, Zijun Cao, Yu Otake)
 - TC304/TC309 Student Contest
 - Possibly a pre-conference event (APSSRA organizer will decide).
 - Keynote (J Ching)
 - Possible short courses
 - Jianye will sound out the interests from TC304 members for offering short courses in APSSRA 2020.
 - KK mentioned about the possibility that TC304 Young Group (Andy Leung, Zijun Cao, and Lei Wang) presents the short videos as a short course in APPSRA 2020. Jianye will discuss this possibility with Young Group.
- 13th International Conference on Structural Safety & Reliability (ICOSSAR 2021), 21-25 June 2021, Tongji University, Shanghai, China
 - <http://www.icossar2021.org/>
 - Important dates
 - Proposals for minisymposia and organized sessions due: 30 Nov. 2019
 - Abstracts due: May 31 2020
 - Full paper due: Dec 31 2020

4. Other businesses

- TC304 Young Group (Andy Leung, Zijun Cao & Lei Wang)
 - Short videos
 - Young Group has set six topics for short videos (about 15 min each) introducing different aspects of geotechnical risk and reliability. Target audience would be practicing engineers and students. Yu Wang and Zijun Cao are working on the recording of webinars to iron out potential technical issues with the recording. Other videos should follow shortly.
 - Jianye encouraged attendees to contribute short videos.

- Marco Uzielli produced a 90-min ISSMGE webinar in 2017 on “Risk and Geotechnical Engineering”: <https://www.issmge.org/education/recorded-webinars/risk-and-geotechnical-engineering>
- Wojciech and Giovanna proposed to host a TC304 workshop in 2020 at Wrocław University of Technology. Details will be discussed between Wojciech and Giovanna and will communicate with Jianye.
- Possible collaboration with European Large Geotechnical Institutes Platform (ELGIP)
 - Jianye briefly introduced the nature of ELGIP, which consists of researchers from major European geotechnical research institutes such as NGI and Deltares. ELGIP expressed interests for collaboration with TC304 through Timo Schweckendiek’s email. Armin Stuedlein had a preliminary meeting with Joost from ELGIP in ECSMGE 2019, Iceland. Jianye has replied positively to ELGIP about the possible collaboration. Jianye mentioned about the possibility to extend the TC304 workshop in Wroclaw to accommodate the possible events with ELGIP. Wojciech will communicate the details with Timo.

Meeting adjourned at 330pm.



From left to right:
Marcin Chwala, Hyunki Kim, Wojciech Pula, Kok-Kwang Phoon, Jianye Ching, Marco Uzielli,
Mikhail Kholmyansky, Takayuki Shuku, Mika Knuuti, and Mohammadsadegh Fardahi