

Minutes for 26th ISSMGE TC304 Meeting (ICOSSAR 2017)

Date: 9 Aug 2017 (Wed)

Time: 5-6 pm

Venue: Seminar room AC0230, level 2, Technical University of Vienna, Austria

Members: KK Phoon (Chair), Jianye Ching (secretary), Ivan Depina, Rafael Jimenez, Jinhui (Lisa) Li, Zhongqiang Liu, Sónia H. Marques, He-Qing Mu, Shinichi Nishimura, Giovanna Vessia, Ikumasa Yoshida, Qingxia Yue, Limin Zhang

Guest: Andy Y.F. Leung

Meeting begins at 5pm

1. Approval of the 25th TC304 minutes (Geo-Risk 2017, 4 June 2017)

Minutes are approved.

2. ISSMGE Global Survey on State of the Art (SOA) and State of Practice (SOP)

KK recapitulated the three general questions asked in the above survey:

1. Have you adopted a reliability- or risk-informed method for design, assessment, and/or management of a geotechnical project?
If YES to the first question, provide some project details and highlight how your method complements the factor of safety approach?
If NO to the first question, what are your reservations or concerns?
2. In relation to bridging state-of-the-art and state-of-the-practice, which aspect(s) of reliability- or risk-informed decision making deserve the most attention (e.g. role of engineering judgment, selection of characteristic value, statistical interpretation of site data and other geotechnical data, target reliability/risk level, Bayesian observational approach, codification versus site-specific needs)?
3. What are the top three items in your 'wish list' that you feel would facilitate adoption of reliability or risk-informed decision making in geotechnical practice (e.g. statistical guidelines, databases, software, short courses, clearer design standards/codes, case studies, bibliography)

A summary report of the survey results has been prepared by Jianye and Jie Zhang (attached). The third question is the most important question. The top "wish list" items include (a) clearer design codes, (b) case studies and examples, (c) soil/rock databases, (d) statistical guidelines for site investigation data, (e) short courses or workshops, and (f) softwares.

These survey results should guide the future TC304 directions. This summary report is available in Chapter 10 of the Joint TC205/TC304 discussion group report.

3. Joint TC205/TC304 discussion group reports/chapters

KK thanked all lead discussers for preparing the report chapters. There are 10 chapters. All chapters will be finalized by 14 August 2017 and submitted to the organisers of 19ICSMGE for inclusion in the conference USB. KK thanked Hyunki Kim for making this arrangement. He opined that making this report available in the 19ICSMGE conference

USB will broaden the readership. He mentioned that Hyunki Kim has also kindly arranged the distribution of 100 hard copies during the Joint TC205/TC304 Workshop to be held in Seoul in conjunction with 19ICSMGE on Sep 20 2017.

4. Conferences/workshops/short courses

- Activities in 19th International Conference on Soil Mechanics and Geotechnical Engineering (ICSMGE 2017), Sep 17-22 2017, Seoul, Korea (<https://www.icsmge2017.org/>):
 - Suzanne Lacasse Lecture (Farrokh Nadim), 19 Sep 2017 (510-550 pm)
 - Joint TC205/TC304 Workshop, Sep 20 2017 (morning) (Brian & KK)
 - Presentation and discussion of the chapters from the Joint TC205/TC304 working group on 'Discussion of statistical/reliability methods for Eurocodes
 - TC304 session, Sep 20 2017 (330-5pm) (General Reporter: Hyunki)
 - 10 papers
 - TC304 meeting, Sep 20 2017 (5-630pm)
 - TC205 intends to hold a board/technical meeting in ICSMGE 2017. The meeting will be partly administrative but mainly an opportunity for discussion about limit state design, partial factor design and performance based design (Brian).
- 27th International European Safety and Reliability Conference (ESREL2017) on Safety and Reliability Theory and Application, Portorož, Piran, Slovenia, June 18-22 2017
 - 2 sessions chaired by Sónia H. Marques containing 7 papers
 - ESREL 2018 will be held in Trondheim, Norway.
- 2nd International Workshop on Resilience of Urban Tunnel and Pipeline, July 15 2017 (HW Huang, Michael Beer & Bilal Ayyub), and 2nd International Workshop on Monitoring and Inspection on Metro Tunnel, July 16 2017 (HW Huang & Yadong Xue), Tongji University, Shanghai, China.
 - 180 attendees
 - 7 keynotes and 2 invited lectures on July 15, including Hsein Juang and KK Phoon
 - 7 keynotes on July 16, including HW Huang
- TC304/TC205/GI-RAM/GEOSNet mini-symposium "Reliability of geotechnical structures" in 12th International Conference on Structural Safety and Reliability (ICOSSAR2017), 6-10 August, 2017, Vienna, Austria (KK Phoon, J Ching & GA Fenton)
 - 3 sessions with 14 papers presented.
 - Next ICOSSAR 2021 will be held in Tongji University, Shanghai, China.
- 15th International Conference of the International Association for Computer Methods and Advances in Geomechanics (15 IACMAG), Oct 19-23, 2017, Wuhan, China
 - "Computational probabilistic geomechanics" (KK Phoon, DQ Li & M Beer)
 - 35 papers have been received, but KK and Dianqing are working with the organisers to arrange a full day track containing around 20 papers.
- 6th International Symposium on Reliability Engineering and Risk Management (6 ISRERM), May 31-June 1 2018, Singapore (chaired by KK)
 - Four TC304 special sessions
 - Yu Wang and J Ching "Geotechnical risk and reliability"
 - Dianqing Li and Dagang LV "Meta-model based uncertainty quantification and reliability analysis"
 - Hongwei Huang & BM Ayyub "Resilience of geostructural system and infrastructure"
 - Limin Zhang "Landslide risk assessment and management"
- 5th China National symposium on Engineering Risk and Insurance, Aug 2018, Harbin Institute of Technology Harbin, China (Dagang LV & HW Huang)

- International Symposium for Geotechnical Safety & Risk (ISGSR 2019), Dec 11-13, 2019, Taipei, Taiwan (J Ching)
 - Short course on Dec 11
 - 20+ sessions (15+ organized sessions)
 - Two honour lectures: Wilson Tang Lecture & Suzanne Lacasse Lecture
 - Special session honoring Prof. Yusuke Honjo (Makoto Suzuki)
- Shin-ichi commented that the next APSSRA will be held in Tokyo in 2020.
- KK encourage members to organize sessions/panels related to emerging areas such as machine learning in the above events (6ISRERM 2018 Singapore, ISGSR 2019 Taipei, APSSRA 2020 Tokyo).

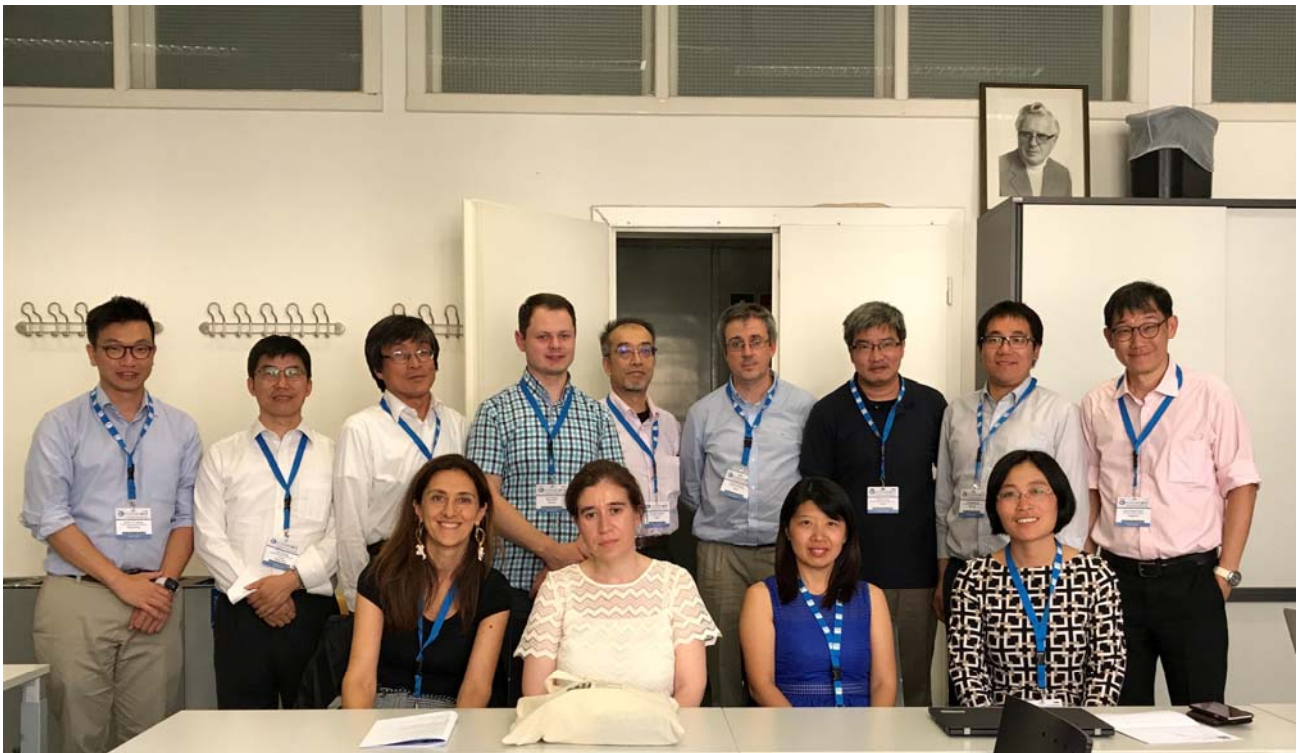
5. Any other business

- Georisk, Assessment and Management of Risk for Engineered Systems & Geohazards (Limin)
 - Paper acceptance ratio is now about 30%.
 - Mock impact factor (IF) for Georisk has reached Q2 in both Engineering-Geological and Geosciences-multidisciplinary categories (IF is way above average for Engineering-Geological and above average for Geosciences-multidisciplinary), so Georisk is now qualified to apply for the Emerging Sources Citation Index (ESCI).
 - 10th Anniversary special issue (KK)
 - Special issue honoring Prof. Yusuke Honjo to be released in Dec. 2019 (Makoto Suzuki)
 - Giovanna may plan for a special issue honoring late Prof. Claudio Cherubini.
 - Georisk welcomes the submission of review papers. KK mentioned that a review paper on application of data analytics, machine learning, and artificial intelligence will help to strengthen research impetus in this direction. He suggested He-Qing to look into this possibility with Kelvin Yuen.
- Jianye mentioned that he is leading the development of a soil property estimation software called Soil Properties Manual version 2 (SPM2). He would provide more details during the next TC304 meeting in 19ICSMGE.

Meeting adjourns at 615pm



From left to right: He-Qing, Limin, Shin-ichi, Giovanna, Ivan, Sonia, Yoshida, Rafael, Lisa, Jianye, Zhongqiang, Qingxia, KK



Leftmost: Andy