

Minutes for 27th ISSMGE TC304 Meeting (19th ICSMGE)

Date: 20 Sept 2017 (Wed)

Time: 5-620 pm

Venue: Room 208 in the conference venue

Attendees: Kok-Kwang Phoon (Chair), Jianye Ching (secretary), Zijun Cao, Arjan Grashuis, D.V. Griffiths, Rafael Jimenez, Hyunki Kim, Andy Y.F. Leung, Dianqing Li, Bak Kong Low, Sonia H. Marques, Shin-ichi Nishimura, Brian Simpson, Armin Stuedlein, Yu Wang, Gil Lim Yoon, Chan-Young Yune

Guests: Ahmad Kahiel, Hansaem Kim

Meeting begins at 5pm

1. Approval of the 26th TC304 minutes (ICOSSAR 2017, 9 Aug 2017)

Minutes are approved.

2. Review for the past TC304 activities from 2009 to 2017 - TC304 report for Council Meeting Seoul 2013-2017 (KK)

KK shared the PPT distributed by TOC Chair, Pierre Delage "ISSMGE TOC TCs meeting Seoul 20 Sept 2017". In particular, KK mentioned that the Chair is strictly limited to two 4-year terms with reference to page 13. He said this will be his last meeting as TC Chair and he would convey minutes of our 25th meeting recording an unanimous vote for Jianye to succeed as Chair to TOC after this meeting*.

KK briefly reviewed the TC304 activities during 2013~2017, which has been distributed previously in "TC304 report for Council meeting":

- TC304 has conducted 16 meetings, both physical and email meetings. Sonia mentioned that the 26th meeting in ICOSSAR 2017, 9 Aug 2017, is not included in the report. Hence, there should be 17 meetings.
- TC304 has organized 31 events during between 2013 and 2016 (conference, workshop, short course, etc.), including joint events with TC205. The joint TC205/TC304 report can be downloaded from the TC304 website. The events in 2017 are given in item#4 below.
- TC304 has produced 23 deliverables including 1 ISSMGE Technical Report, 1 ISSMGE Honour Lecture (Suzanne Lacasse Lecture with the 3rd lecture delivered by Farrokh Nadim on 19 Sep 2017 in 19ICSMGE), 6 design codes & guidelines, 7 books, and 8 special issues

KK opined that TC304 is one of the most active TCs in ISSMGE and he welcomed new members to join our activities. With reference to page 14 of Pierre's PPT, he highlighted that other than 2 official members nominated by member societies and 4 members + secretary nominated by Chair, there is no limit on the number of corresponding members. However, access to ISSMGE website for updating all TC membership details falls within the remit of the member societies. Interested people are advised to approach their member societies to include their names as corresponding members.

***Post meeting notes:** KK has emailed Pierre Delage and Kenichi Soga, with copy to President of CTGS, Prof KJ Shou, on 21 Sep 2017 to formally nominate Jianye as Chair of TC304. The Chinese Taipei Geotechnical Society (CTGS) has agreed to host TC304 from 2017-2021.

3. Joint TC205/TC304 discussion group reports/chapters

- 19 ICSMGE TC205/TC304 workshop (Brian & KK)
 - This workshop was successfully conducted on 20 Sep 2017, Hall E5, between 9-1230 pm in 19ICSMGE. Nine presentations were delivered by the discussion leaders culminating in an interesting discussion on future directions and challenges.
 - 150 hard copies were printed for distribution during the workshop. KK thanked the local organisers for paying for these hard copies out of their own pockets (Hyunki Kim, Kookmin university; Jaehyun Park, KICT; Dongwook Kim, Incheon National University)
 - The final report is also distributed through the conference USB and TC304 website: <http://140.112.12.21/issmge/tc304.htm>

4. Past activities

- 19th ICSMGE
 - Suzanne Lacasse Lecture, 19 Sep 2017 - Farrokh Nadim delivered an excellent lecture on “Reliability-Based Approach for Robust Geotechnical Design”
 - Joint TC205/304 Workshop, Sep 20 2017 (Chairs: Brian & KK)
 - TC304 discussion session, Sep 20 2017 (Chairs: KK & Jaehyun)
 - Hyunki delivered an overview of “Engineering practice of risk assessment and management (TC 304)” as General Reporter.
 - There are 11 papers, but only 9 papers were presented.
 - KK thanked Hyunki, Jaehyun, Gil-Lim, Dongwook, Chanyoung and Hansaem for organizing the joint workshop and the TC304 discussion session.
- 2nd International Workshop on Resilience of Urban Tunnel and Pipeline, July 15, 2017, and 2nd International Workshop on Monitoring and Inspection on Metro Tunnel, July 16, 2017, Shanghai, China (HW Huang)
 - 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.

5. Future activities

- Major event in 2018: 6th International Symposium on Reliability Engineering and Risk Management (6ISRERM), May 31-June 1 2018, Singapore (chaired by KK)
 - KK shared that the theme of this conference is resilience engineering. One objective is to discuss the role of reliability in robustness and resilience.
 - Jianye shared that 6ISRERM would be the key event for TC304 in 2018 and he would like to schedule a physical TC304 meeting in this conference. He said the following special sessions are being organized by TC304:
 - Yu Wang and Jianye Ching “Geotechnical risk and reliability”
 - Dianqing Li and Dagang Lv “Meta-model based uncertainty quantification and reliability analysis”

- Hongwei Huang & Bilal Ayyub “Resilience of geotechnical system and infrastructure”
 - Zijun Cao and He-Qing Mu “Geotechnical databases and data analysis” – Zijun shared that the purpose of this session is to promote more research on machine learning. As a post-meeting note, President Charles Ng raised an interesting suggestion to start a new TC on machine learning during the closing ceremony.
 - LM Zhang “Landslide risk assessment and management”
 - TC304 Forum on "Constructing open-to-public geotechnical databases - possible obstacles and solutions" (Armin & Jianye)
 - Several members of TC304 have agreed to serve as panel members for this forum, which will tackle the opportunities and limitations of pursuing an open-source database
 - Armin pointed out that the US National Science Foundation has funded a new center as part of the NHERI Program called “DesignSafe-CI” (see <https://www.designsafe-ci.org/>) that has, among other features, the capability to preserve large datasets as part of its mandate. Armin will learn more about this option and present this as an idea at ISRERM.
- 15th International Conference of the International Association for Computer Methods and Advances in Geomechanics (15 IACMAG), Oct 19-23, 2017, Wuhan, China - session on “Computational probabilistic geomechanics” (KK Phoon, DQ Li & M Beer)
 - KK said the technical program has not been published at the website. However, he mentioned that there should be at least 2 sessions consisting of between 10 and 20 presentations.
- 5th China National symposium on Engineering Risk and Insurance, Aug 2018, Harbin Institute of Technology Harbin, China (Dagang LV & HW Huang)
 - The first announcement: October, 2017
 - Call for paper: November 1, 2018
 - Paper due: February 1, 2018
- International Symposium for Geotechnical Safety & Risk (ISGSR 2019), Dec 11-13, 2019, Taipei, Taiwan (Chair: Jianye Ching)
 - <http://www.isgsr2019.org/>
 - Call for abstract: June 1, 2018
 - Abstract due: Aug 31, 2018
 - Wilson Tang & Suzanne Lacasse Lectures
 - Special session honoring Prof. Yusuke Honjo (Guest editors: Makoto Suzuki and Masahiro Shirato)
 - KK shared that the purpose of this session is to present papers appearing in a Special Issue in Georisk on “Recent Developments of Performance-based Design Codes and Practice” honoring Prof Yusuke Honjo. This special issue is being organized. Members who are interested to contribute papers can email KK or Makoto directly (makoto.suzuki@p.chibakoudai.jp)
 - 20+ sessions (15+ organized sessions)
- ICASP13, Seoul, Korea, 2019 (Chair: Junho Song)
 - Website not yet available, to be updated in future
 - TC304 may consider to organize session/mini-symposium
- APSSRA, Tokyo, 2020 (Shin-chi) – organization in progress

6. Any other business

- Future directions for TC304 (Jianye)
 - Jianye briefly reviewed the wish list items from SOA-SOP survey

- Clearer design codes
- Case studies & examples
- Soil/rock database
- Statistical guideline for site investigation data
- Short course or workshop
- Software

Jianye summarized them into three key elements: databases, softwares & education.

- Jianye opined that open-to-public databases can be a good starting point to foster research addressing practical issues. Softwares are subsequently developed and demonstrated in short courses to show usefulness of statistics/reliability. Armin and Yu have agreed to lead two task forces in the next term:
 - Armin: global CPT/CPTU databases. At this time, Mark Jaksa and Armin have agreed to make their databases open to public. Gil pointed to include NGES data but cautioned that data quality is important not just amount of data. Jianye requested Armin to take note of data from NGES. Yu said NGES has been documented in ASCE GSP. Data are detailed and systematically documented. KK said not to ignore the usefulness of unstructured data – maybe with gaps and noise. Rafael said work has been done in this direction. Hyunki emphasized the need to ensure database owners are properly acknowledged.
 - Yu: global soil/rock property databases. Jianye is willing to share his soil/rock databases. Rafael is also willing to share his rock database.
- Brian urged TC304 to pay attention to SOA-SOP survey results for TC205, in particular the item regarding serviceability. Brian also mentioned that database should contain relevant details (e.g., need to know the test type for s_u). Jianye replied that TC304 may want to continue to work with TC205, because TC205 is the junction point between SOA and SOP. An example is characteristic value.
- Hyunki mentioned the need for case studies.

Armin and all attendees thanked KK for his 8 years of service to TC304.

The meeting adjourns at 620pm.

(Photos in the next page)



TC304 meeting at 19 ICSMGE



Dinner after the meeting