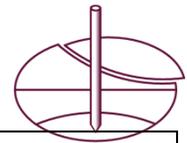


ISSMGE FOUNDATION REPORT ON CONFERENCE ATTENDANCE

Your Name: Suguang Xiao	Your Organization: Lehigh University	Date of report: September 11, 2016
Conference Title: 1st International Conference on Energy Geotechnics ICEGT 2016	Location of Conference: Kiel, Germany	Dates of Conference: August 29-31, 2016
What you learned: <p>The conference was envisaged to bring together experts and top researchers from all over the world who work on energy geotechnics in industry, academia and government. I learned a tremendous amount about the latest issues in the field of energy geotechnics via the conference.</p> <p>On the first day of the conference, we visited the GEOMAR/Helmholtz Centre. Dr. Haeckel delivered a lecture about marine gas hydrates. In the lecture, he presented the current conditions and difficulties in exploitation of gas hydrates. We also visited the labs investigating the physical and mechanical properties of gas hydrates.</p> <p>During the following three days, I attended lectures throughout the conference and tried to learn the most possible from other researchers. I attended all keynote presentations and most of the mini-symposiums. The mini-symposiums I attended included:</p> <ul style="list-style-type: none">Geomechanical Characterization and Modeling of Hydrate Bearing SedimentsEnergy Geo-storage & Geo-structuresShallow & Deep Subsurface Geo-thermal SystemsShallow Geothermal SystemsNatural & Hydraulic Fractured Reservoirs <p>I presented my research on the thermo-mechanical behaviour of the soil-energy pile interface, entitled "Cyclic Thermal Loading Effects on Soil-Energy Pile Interaction" on August 30th. My supervisor, Dr. Suleiman gave me many suggestions during the rehearsal of my presentation. I think I did very well during my presentation and was excited to hear several good questions/comments from the audience.</p> <p>On the last day, I visited the CO₂ Pilot storage site in Ketzin and Dr. Lüth gave us a lecture about the research of their team. CO₂ injection at Ketzin began on June 30, 2008 and ended on August 29, 2013. During this period of over five years, a total amount of 67 kt of CO₂ was injected into a saline aquifer without any health, safety, or environmental issues. Four observation wells were used to monitor the CO₂ migration underground.</p>		
People you met: <p>The conference provided an opportunity to meet many researchers, professional leaders and new/old friends who are engaged in energy geotechnics research. A few of them are listed below:</p> <ul style="list-style-type: none">J. Carlos Santamarina (King Abdullah University of Science and Technology, KSA)Tomasz Hueckel (Duke University, USA)Kenichi Soga (UC Berkeley, USA)Antonio Gens (UPC Barcelona, Spain)		



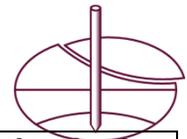
Marcelo Sanchez (Texas A&M University, USA)
Fleur Loveridge (University of Leeds, UK)
Guoqing Cai (Beijing Jiaotong University, China)
Junwei Liu (Qingdao University of Technology, China)
Bo Wang (University of Kiel, Germany)

Main features of the conference:

1. Invited most of the famous Professors in Energy Geotechnics.
2. Organized two tours of the unique and cutting-edge research at the CO₂ and Ocean Labs, which was a very special experience for me
3. The conference was hosted at Kiel University with participants from over 26 countries and a total of 116 oral and poster presentations.

Your comments on the conference:

This conference was very successful, my appreciation is to the organizing committee ISSMGE TC308 and the volunteer Professors and students at Kiel University. Kiel is a quiet and beautiful city!



Please attach short report (maximum 400 words) suitable for publication in the ISSMGE Bulletin:

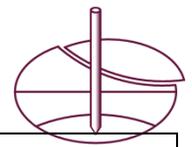
The 1st International Conference on Energy Geotechnics, ICEGT 2016, provided a platform for interaction and communication among academic and non-academic parties to exchange ideas, innovations and future practices in the area of energy geotechnics.

One of the technical sessions at the 1st International Conference on Energy Geotechnics ICEGT 2016 was *Thermo-active Foundations, Tunnels and Earth-coupled Structures*, which is the current research focus of my PhD, and a research area I hope to pursue as a future faculty member. I presented a talk on the thermo-mechanical behavior of the soil-energy pile interface entitled “Cyclic Thermal Loading Effects on Soil-Energy Pile Interaction” based on my test results from thermal-modified borehole shear tests (Thermal-mBSTs) performed at Lehigh University.

I attended the two site tours organized by the committee of ICEGT 2016. One is the GEOMAR/Helmholtz Centre. Dr. Haeckel delivered a lecture about marine gas hydrates. In the lecture, he presented the current conditions and difficulties in exploitation of the gas hydrate. The other One is the CO₂ Pilot storage site in Ketzin, Dr. Lüth gave us a lecture about the CO₂ storage research of their team.

My career goal is to find an academic position where I can make full use of my experiences and specialties in geotechnical engineering. The feedback and comments during my presentation and, throughout the conference, will help me to further develop my research ideas during my doctoral period and future career in academia. The presentation, also, helped me develop my communication skills with scientists in my area of research. Moreover, the connections I developed by networking with the speakers and attendees will be an invaluable resource for my development of research collaborations and the search for a faculty position.

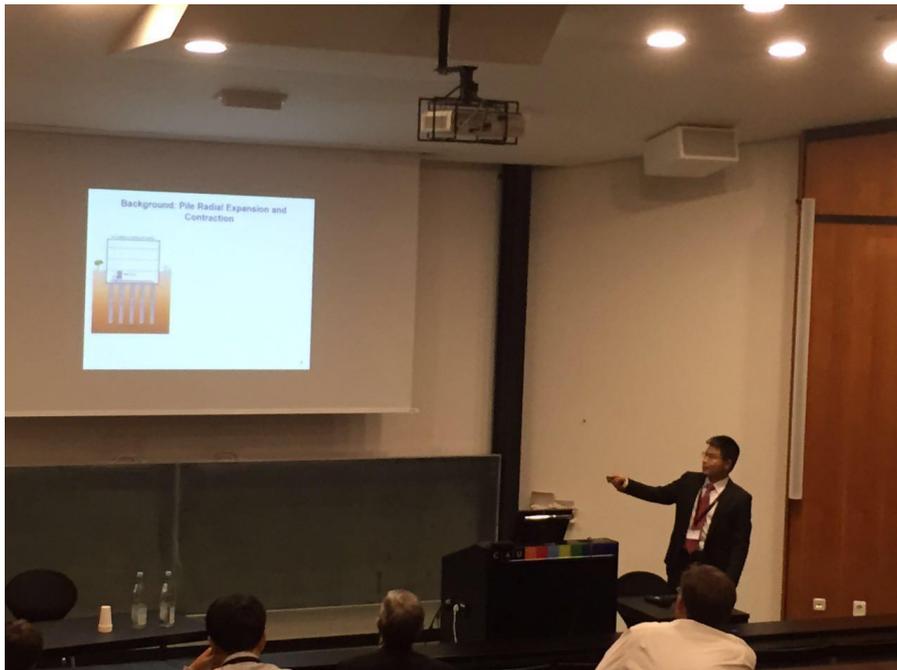
Other technical topics at the conference included carbon sequestration, gas hydrate sediments, shallow & deep subsurface geo-thermal systems, nuclear waste deposits, etc. This cross-disciplinary conference will benefit my future research career. Exposure to such a broad range of topics accelerated my learning and helped me stay up-to-date on the latest developments in our field. I was excited to learn from the presentations of other speakers.



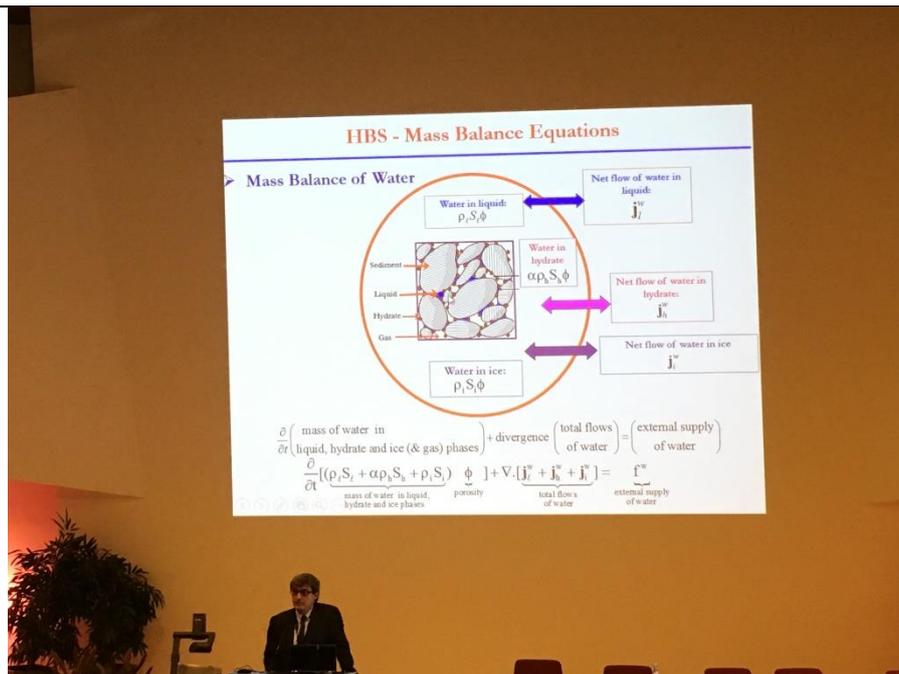
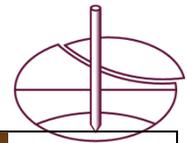
Photographs from Conference:



With Prof. J. Carlos Santamarina in GEOMAR/Helmholtz Centre, Kiel, Aug. 28, 2016



My Presentation, Kiel, Aug. 30, 2016



Keynote Presentation from Prof. Marcelo Sanchez, Aug. 31, 2016



At the CO₂ Pilot storage site, Ketzin, Sep. 1, 2016