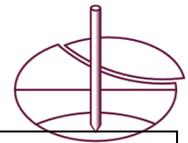


**ISSMGE FOUNDATION
REPORT ON CONFERENCE ATTENDANCE**

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| <p>Your Name: Tiago Gaspar</p> | <p>Your Organization: University of Pretoria</p> | <p>Date of report: 23/08/2018</p> |
| <p>Conference Title: The 7th International Conference on Unsaturated Soils (UNSAT2018)</p> | <p>Location of Conference: The Hong Kong University of Science and Technology</p> | <p>Dates of Conference: 3rd-5th August 2018</p> |
| <p>What you learned:</p> <p>Attending UNSAT2018 provided me with the opportunity to witness first hand specific areas of research that are being focussed on in the field of unsaturated soil mechanics (e.g. sand/bentonite mixtures as barriers for radioactive waste, new measurement techniques for unsaturated soils, landslides etc). The Blight lecture given by Prof. D. Fredlund not only highlighted the importance of the Soil Water Characteristic Curve (SWCC) in establishing governing properties of unsaturated soil, but also provided a practical approach to measuring the SWCC and shrinkage curve as well as the derivation of Unsaturated Soil Property Functions (USPFs) from these measurements. Furthermore, the importance of being able to quantify volumetric changes as a sample undergoes drying (or wetting) was of particular relevance to me as it directly relates to the topic of my PhD thesis, which is related to centrifuge modelling of piled foundations in expansive clays.</p> <p>The conference hosted numerous presentations addressing the problems associated with expansive clays thereby highlighting its relevance as a topic of research. The presentations I attended shed light on sampling techniques, useful instrumentation and behavioural aspects of expansive clays that will undoubtedly be useful to me throughout my PhD research.</p> | | |
| <p>People you met:</p> <p>Prof. Delwyn Fredlund Prof. Harianto Rahardjo Prof. Charles Ng Prof. Ning Lu Prof. Domenico Gallipoli Dr. Alessio Ferrari ...and many more...</p> | | |
| <p>Main features of conference:</p> <p>UNSAT 2018 was a three-day conference whereby the world's researchers were able to present the latest developments in the field of unsaturated soil mechanics. Presentations covered many aspects of unsaturated soil research ranging from fundamental measurement techniques, physical modelling, numerical modelling and case studies. Presenters at the conference ranged from young up-and-coming researchers to the more well-established researchers with decades of experience on which to draw.</p> | | |



Your comments on the conference:

UNSAT 2018 was an extremely informative and well organised conference covering a wide range of aspects relating to unsaturated soil mechanics. The volume and quality of presentations given truly maximised the benefit for all attendees. The benefit gained from attending UNSAT 2018 highlighted the importance of attending future conferences on unsaturated soil mechanics both as a researcher or as a practicing engineer.

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

In August 2018 the 7th International Conference on Unsaturated Soils (UNSAT 2018) was hosted at the Hong Kong University of Science and Technology (HKUST). UNSAT 2018 hosted the Blight lecture, presented by Prof. D. Fredlund. The presentation emphasised the importance of the Soil Water Retention Curve (SWRC) and identified it as being the key to implementing unsaturated soil mechanics in geotechnical engineering practice. Prof. Fredlund illustrated how volumetric measurements taken during a drying or wetting cycle can be used in conjunction with a conventional gravimetric moisture content versus suction relationship to provide a more complete understanding of unsaturated soil behaviour. In addition to the Blight lecture, several keynote lectures were expertly delivered by world renown researchers, each providing valuable insight into a specific aspect of the field.

The remainder of the conference was carried out in two parallel sessions where each presenter was allocated five minutes. Despite the time constraint, the presentations given were succinct and all researchers managed to convey key aspects of their work within the short time frame. The fast-paced nature of this arrangement allowed attendees to maximise their intake during the three days of the conference. Delegates were also given a tour of the geotechnical laboratory at HKUST. Being able to witness the inner workings of one of the world's top unsaturated soils laboratories was an amazing e experience.

Attending UNSAT 2018 allowed me to be exposed to the state-of-the art in unsaturated soils research. The opportunity to meet and discuss ideas with the top researchers in the field was insightful, inspiring and will undoubtedly benefit the quality of my doctoral thesis, as well as any research conducted thereafter. I am extremely grateful to the financial assistance provided by the ISSMGE Foundation, without which this experience would not have been possible.

Photographs from Conference:

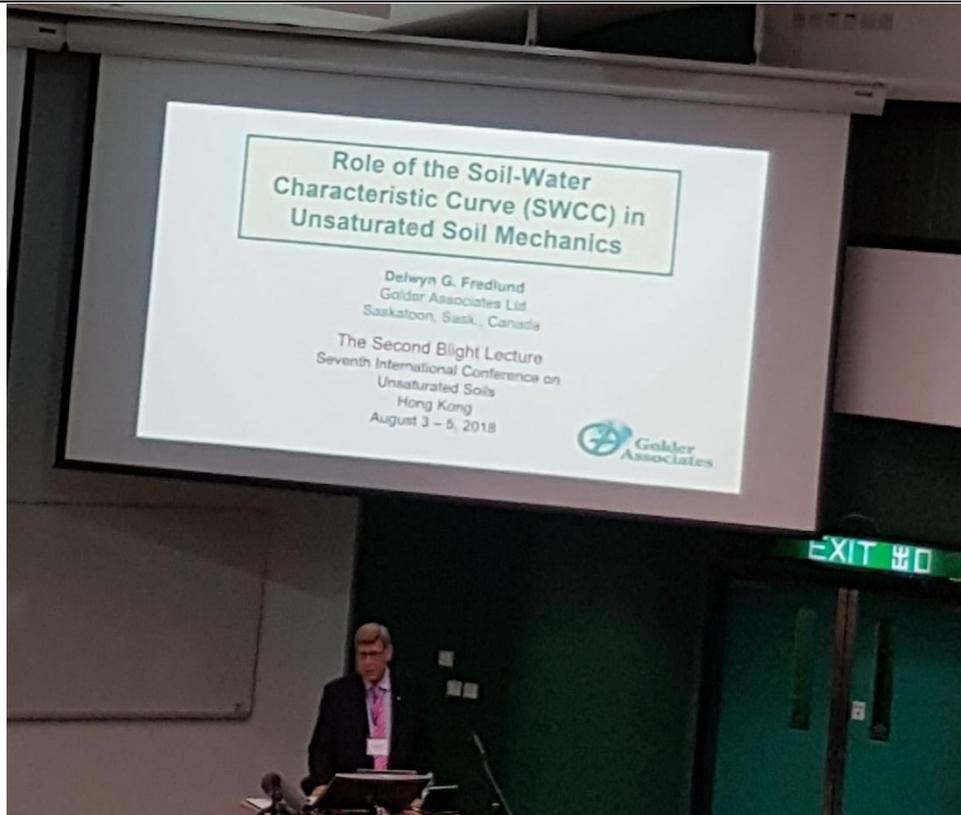
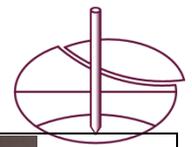


Figure 1: Prof. D. Fredlund delivering the second Blight Lecture



Figure 2: Prof. N. Lu presenting a special lecture

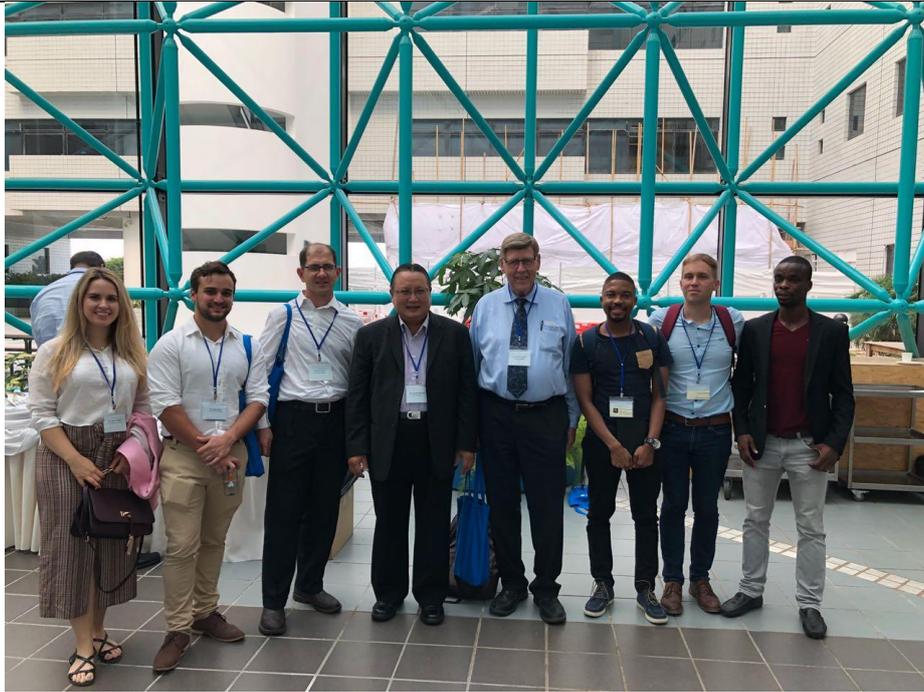
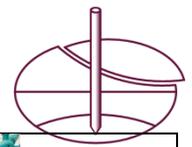


Figure 3: Young researchers from across the world meeting Prof. D. Fredlund and Prof. H. Rahardjo