

# Australasia Region HTC Activity Update Geo-Education project Report

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# Disclaimer

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1. This HTC activity update report has been prepared for reference and use by the HTC teams in their work, and is shared on the HTC website for general information. This report should not be taken as accurate or complete, but an indication of status of the HTC work.
2. Each region's HTC team started work at differing times, and has focussed on specific areas, and therefore there will be gaps in the reports, which are to a set template. These gaps may be addressed at a later stage.
3. Each HTC regional team welcomes individual members of the ISSMGE who wish to provide help in the HTC work. Contact can be made via details provided at the end of this report.
4. Comments, suggestions, and notification of any errors or omissions can be made to the HTC team via the contact tab on the HTC website.

# Background

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- The contribution from Australia to the Heritage Time Capsule project was the 50th Anniversary book, <https://htc.issmge.org/uploads/contributions/AGS-50th-Book.pdf>
- It was the opinion of some colleagues that the book did not sufficiently highlight the contribution of academics to the geomechanics profession in Australia. Related conversations about current challenges in education and industry skill deficiencies led to consideration of the topic of geo-education and future needs.
- The intent was to understand perspectives from different stakeholders and start the process of formulating a plan and actions to improve the situation. The invitation was extended to colleagues in New Zealand, considering common issues and challenges.

*[An edited extract from, ISSMGE HTC project session at 14th ANZ Conference on Geomechanics \(2023\), Australian Geomechanics, Vol 58: No 4, pp 10-17, December 2023](#)*

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# Vision and desired end point

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Bring academia and Industry to better work together

to

Improve the education of next generation in Geotechnical Engineering and Engineering Geology, and support young professionals in their learning journey.

# Objectives

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## In the Australasian region

- Deliver an agreed road plan for improving geo education in the coming decades

# Strategy

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- Several Q&A and discussion sessions have been held in 2023 and 2024, through Australia and New Zealand. Different perspectives and insights were shared through these sessions by the speakers and the audience.
- As a result, a path of action has been developed, aimed at engaging with end clients in Australia and New Zealand to collaborate on profiling geotechnical engineering as it is practiced now and promoting geotechnical engineering as a profession

# HTC Australasia Team

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## TEAM REPRESENTATIVES

Golnaz Alipour Esgandani, Australia (lead Australasia HTC)

Hugo Acosta Martinez, Australia

David Airey, Australia

Eleni Gkeli, NZ

Christoph Kraus, NZ

Xue Le, Australia

Rolando Orense, NZ

Sukumar Pathmanandavel, Australia (HTC Lead)

Jason Surjadinata, Australia

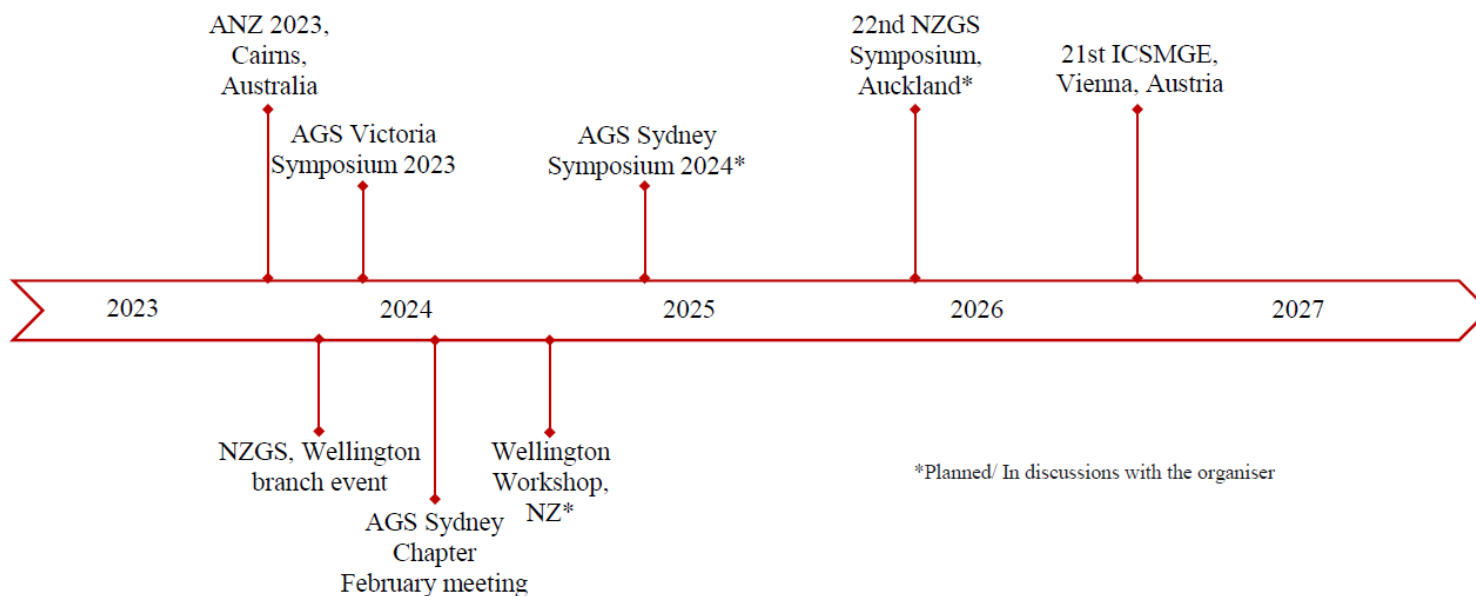
Liam Wotherspoon, NZ

Negin Yousefian, Australia



# Work completed and reporting (1) - Road map

ISSMGE HTC Australasia - Geo Education  
Outline of the activities, for illustration purposes only



Our roadmap - HTC sessions that have taken place and are planned (March 2024)

The outcomes of this project will be delivered to 21st ICSMGE, Vienna, Austria conference in the current presidential term (2022-2026); and then the work continues on for the benefit of Australasia region.

# Work completed and reporting (2) - Reporting and publications

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- [Australian Geomechanics Journal, Dec 2023](#)
- [New Zealand Geomechanics Journal, Dec 2023](#)
- [Engineering New Zealand Journal, Dec 2023](#)
- Australian Geomechanics Journal, June 2024 (awaiting publication)

# Challenges

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1. Both Australia and NZ have experienced in recent times significantly elevated building and construction activities, resulting in high levels of engineering activity. Attracting individual members to engage in the various activities of the HTC therefore requires a higher and consistent level of effort on the part of the HTC team.
2. The HTC team has encountered strong support by individual members and related institutions to the idea of tackling geo-education, although there are various opinions on what can or should be done. The challenge has been to select a path of action that both complements actions of others, as well as can serve to act as strong and useful component of the efforts on geo-education.
3. The HTC team feels they have now arrived at this point, and the work to be carried out in the second half of 2024 will help the team better understand the validity of this path of action.

# Timeline

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- Preparing towards 21<sup>st</sup> ICSMGE, Vienna, Austria
  - in development

# Supporting Discoverers

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## 1. Working with YMPG team

Attempts will be made in 2024/2025 to more formally interact with the young members in Australia and New Zealand

## 2. Young Engineers Conferences

The HTC team will consider actions to promote the HTC project and in particular the Discoverer program with the attendees of the 15<sup>th</sup> Young Geotechnical Professionals Conference in Adelaide, 6-9 November 2024

## 3. Social Media

In development

# Next steps

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## Supporting other regions' HTC efforts

- Both the New Zealand Geotechnical Society (NZGS) and the Australian Geomechanics Society (AGS) have provided financial support for three members of the HTC Australasia team, Hugo Acosta Martinez, Eleni Gkeli and Liam Wotherspoon to travel to Shanghai, China, to lead and deliver the HTC session at GeoShanghai 2024, to be held at the end of May 2024.

## Abstracts for other than geotechnical conference/ publications

- Two abstracts based on the work undertaken or planned to be undertaken by the HTC Australasia have been submitted to the organizers of the 35th Australasian Association for Engineering Education Annual conference, Dec 2024, to be held in Christchurch, in Dec 2024.
- It is hoped that presenting in such a forum will both increase the recognition of the issues concerning geo-education , as well as provide a timely opportunity to seek feedback and guidance from academic leaders and practitioners in other disciplines.

# How can you get involved

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Please do not hesitate to contact Geo-Education project lead, Golnaz Alipour Esgandani ([golnaz.Alipour@mq.edu.au](mailto:golnaz.Alipour@mq.edu.au)), if you are interested in this project or need further information.