

IACS/IAVCEI Volcano-Ice Interactions Commission Report 2023/24

Website: viic.iavceivolcano.org

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The main goals of the Volcano-Ice Interactions Joint Commission are to promote research related to the field of glaciovolcanism, support sessions at international conferences, and foster connections between members of the volcanology and cryospheric science communities. We aim to promote the use of glaciovolcanism for understanding environmental and landscape change, volcanic eruption process, and volcanic and cryospheric hazards. Our current membership stands at 124 as of April 2024.

In January 2023, we organised and led a 4-day pre-conference fieldtrip to Ruapehu and Tongariro volcanoes alongside the IAVCEI Scientific Assembly in Rotorua, New Zealand. The fieldtrip focused on glaciovolcanic formations at the two stratovolcanoes. We also held a commission meeting for members and interested parties during the conference.

The main activity of the past year has been to recruit a new leadership team from the IAVCEI side of the joint commission. This was concluded in the autumn of 2023 and they will hold their positions for 4 year-long terms. The new leaders are: Iestyn Barr, Linda Sobolewski, and Tryggvi Unnsteinsson. Iestyn is a Reader in Physical Geography at Manchester Metropolitan University. His research investigates glacier-volcano interactions in several areas globally including Alaska, Iceland, Kamchatka, and Antarctica. Linda finished her PhD in 2023 at the Ruhr-University Bochum focusing on the investigation of subglacial volcanic caves in the Cascade Volcanic Arc. She will start at the University of Iceland in August 2024. Tryggvi is a PhD student in Physical Geography at University of Aberdeen. He is using remote sensing to analyse how volcanic heat affects glacier dynamics.

Activities from us – the new leadership team – include updating the website, discuss future commission activities, and organisation of the first online seminar in April 2024. The talk was given by Eva Eibl from the University of Potsdam: Triggering, migration, and consequences of jökulhlaups in geothermally active regions from a seismological perspective.

Upcoming/planned commission activities:

- Running a dedicated session on Volcano-Ice Interactions at the IAVCEI General Assembly in Geneva, Switzerland in July 2025 (session proposal submitted).
- Continue to hold our virtual seminar series. We already have a list with speakers for the next seminars who would like to present their research.
- Holding an online workshop in September/October 2024 for members and other interested people. The workshop will be aimed towards PhD and MSc students, and other early career researchers, although everyone will be welcome to attend. The workshop will broadly cover topics relevant to volcano-ice interactions with lectures and practicals, if applicable, during short sessions over the course of two to three days.
- Organise a fieldtrip to Iceland in 2025.
- Enhance international networking, especially with researchers in South America.