

## 2023 Update from the GAPHAZ Scientific Standing Group

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Glacier and Permafrost Hazards in Mountains (GAPHAZ), established in 2011, is a scientific Standing Group of the International Association of Cryospheric Sciences (IACS) and the International Permafrost Association (IPA). The group currently stands at more than 192 members from over 24 countries, and includes scientists, practitioners, policymakers and representatives of the private sector. The first 8-year self-evaluation was completed in 2019, and a mailing list and Slack work space was established in early 2021 for members to coordinate and respond to the events in Chamoli district, Uttarakhand, India in February. The Group is working to further establish GAPHAZ as a hub for researchers and stakeholders to connect regarding events and issues related to glacier, glacial lakes and permafrost hazards.

Over the past year, GAPHAZ members have convened, co-sponsored and helped organize several conference sessions and workshops, including a session on "Glacier and permafrost risks in a changing climate" and two synthesis workshops ("Challenges in implementing the Sendai Framework in Mountain Environments" and "Future mountains with low-to-no snow and ice") at the International Mountain Conference (Innsbruck) in September 2022, and an annually repeating session on 'Risks from a changing cryosphere' at the EGU Assembly in 2022 and 2023 (Vienna). In July, GAPHAZ is co-convening a session on Mountain Cryosphere Hazards and Risks (co-organized with IASPEI and IAVCEI) at the IUGG in Berlin.

In 2022, an article on "Assessment Principles for Glacier and Permafrost Hazards in Mountain Regions" was published in the Oxford Research Encyclopedias, which provides an article format of the GAPHAZ technical guidance document from 2017, including updated references (<a href="https://doi.org/10.1093/acrefore/9780199389407.013.356">https://doi.org/10.1093/acrefore/9780199389407.013.356</a>). The technical guidance document has also been translated into Italian, with support from the Italian Research Council. Further, funding support from IACS was provided for the publication of findings from a GAPHAZ-sponsored workshop on GLOF risks, held in Graz and virtually in July 2021 (https://doi.org/10.5194/nhess-22-3041-2022).

GAPHAZ has recently completed its bi-annual rotation of Officers, and is pleased to welcome Pratima Pandey (Indian Institute of Remote Sensing) into the position of Secretary, with Holger Frey (University of Zurich) and Michèle Koppes (University of British Columbia) moving to vice-Chair and Chair, respectively. The Officers coordinate with an active Advisory Board of 13 members, who meet bi-annually. The new officers and the members of the GAPHAZ Advisory Board are currently at work to define the horizon and activities of the Standing Group for 2023-2024, and to continue to broaden the geographic and thematic focus of the group. For updates on the group, including an opt-in list of experts available on the group's website, please visit: <a href="https://www.gaphaz.org">www.gaphaz.org</a>.