

**Postdoctoral Scholar for Groundwater Study in Mountain Watersheds
University of Calgary, Canada**

Physical Hydrology Research Group (<https://ucalgary.ca/people/hayashi/research>) at the University of Calgary seeks a postdoctoral scholar (PDS) for groundwater study in mountain watersheds, jointly funded by the university and Alberta Environment and Protected Areas (EPA). The PDS will synthesize field-based knowledge of alpine groundwater in the Canadian Rockies accumulated over the past two decades, develop relatively simple mathematical tools to represent the storage capacity of alpine aquifers based on readily available geospatial information, incorporate the new mathematical tools in the operational hydrological model used by the Alberta Government, and examine the response of river baseflow to climatic variability.

This is a two-year position. It will be based at the University of Calgary, but it will also be integrated to Alberta EPA to collaborate with operational hydrologists and water managers of the Alberta Government. The PDS will serve as scientific lead on this project, working with Dr. Masaki Hayashi at the University of Calgary and Dr. Brandi Newton at Alberta EPA.

Key activities will include: (a) analyzing geospatial information including field-based ground-truthing of remote sensing data, (b) developing new mathematical tools and incorporating them in existing hydrological models, (c) model simulation and future baseflow prediction, and (d) developing peer-reviewed manuscripts and presentations. An ideal candidate will have: (1) a PhD degree in physical hydrology or related disciplines, (2) advanced skills in remote sensing and GIS, (3) advanced knowledge of groundwater hydrology, and (4) experience in hydrological modelling. Candidates with exceptional qualification, but without a PhD degree, may be considered as well. The position will start as soon as a suitable candidate is found.

The University of Calgary and the Government of Alberta strongly endorse equity, diversity, and inclusion. Candidates from under-represented groups are particularly encouraged to apply for the position. Interested candidates should send a current CV, academic transcripts, and the name and contact information of three references to Dr. Masaki Hayashi at hayashi@ucalgary.ca.