

Interdisciplinary Centre for Water Research invites applications for 1 RA (Postdoc) in an ISRO funded project

We are looking to hire an enthusiastic researchers in a cutting edge project: “Evaluating NISAR’s glacier-related products in the western Himalaya and developing novel algorithms for SWE” funded by the Indian Space Research Organisation. This project aims at calibrating and validating NISAR data products for Himalayan glaciers and developing a novel snow water equivalent algorithm.

General overview of the project: Several studies projected that climate change will decimate glaciers in the Himalayan region by the end of this century to an extent that most of the glacier fed river systems will become seasonal rivers driven mainly by rainfall. Therefore, monitoring glaciers in the Himalayan region is one of the top priorities for the Indian Space Research Organisation (ISRO) and Ministry of Earth Science (MoES). To better understand Himalayan glaciers and their response to climate change, observations at higher spatiotemporal scales are required. But due to coarse spatiotemporal resolution of existing satellite data and lack of sufficient in-situ measurements, we are far away from achieving a holistic understanding of the variability in available water resources in the Himalayan region. We expect to overcome these issues with the NASA-ISRO Synthetic Aperture Radar (NISAR) mission. In this proposed project, we aim at providing in-situ measurements over the Stok Glacier in Leh (Ladakh) for calibration and validation of the NISAR’s glacier ice velocity and snow water equivalent (SWE) products. The objectives of this proposed project are closely aligned with several cryosphere science themes and categories outlined/solicited in the NISAR UP

Essential Qualification:

Research Associate (eqv. to postdoc): PhD in any discipline of geosciences. Candidate with experience in glaciological fieldwork and RADAR satellite signal processing will be given preference.

Desirable requirement: Good knowledge of programming, particularly in Python/MATLAB and/or R/c/c++, additionally, the candidate with good knowledge of cryospheric sciences will be given preference. Any prior experience in using Synthetic Aperture RADAR data would also help.

Duration: Three years.

Salary: As per DST norms with eligible increments.

How to apply: Interested candidates are requested to send a cover letter (describing their motivation and interests), their CV/resume along with the name and contact information of two referees to bramha@iisc.ac.in. The last date to apply is 7th April 2026.