

ICIMOD Atmosphere Initiative Doctoral Fellowship Call for Application

PhD fellowships to work with ICIMOD scientists on improving knowledge about emissions sources, atmospheric processes, atmospheric change, and impacts in the Hindu Kush Himalayan region.

The International Centre for Integrated Mountain Development (ICIMOD) is a regional intergovernmental learning and knowledge sharing centre serving the eight regional member countries of the HKH – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan. ICIMOD's Atmosphere Initiative was established in January 2013 as part of the Centre's Regional Programme on Cryosphere and Atmosphere. The initiative aims to bring about effective measures and policies for reducing air pollution and its impacts within the HKH region by improving knowledge and enhancing the capacity of partners in regional member countries.

Over recent decades, the HKH region has been affected by rising emissions of air pollutants from urban, industrial, and rural sources. This has raised concerns about deteriorating air quality, impacts on health and visibility, changes in atmospheric heating and cooling, changes in cloud microphysics and in the strength and timing of the monsoon, increasing stratospheric pollution above the Tibetan Plateau, deposition of light absorbing substances onto snow and ice surfaces, and increasing melting of the Himalayan cryosphere.

Since its establishment, the Atmosphere Initiative has attracted high-calibre scientists to work at ICIMOD and has obtained infrastructure to support its mission and vision. ICIMOD is working with regional partners to establish numerous air quality stations and climate observatories. These facilities will not only aid air quality planners and policy makers of the region, it will also provide world class scientific data for new knowledge generation and improve understanding of the atmospheric processes over the HKH. ICIMOD also has state-of-the-art computing facilities to combine regional air quality modelling with observations. In addition, ICIMOD is organizing several field campaigns to study atmospheric phenomena of regional concern, such as the persistent winter fog over Indo-Gangetic Plain and experimental characterization of emission sources.

The PhD position

As a regional organization, ICIMOD strives to bring regional scientists and students to work together on areas of mutual interest with the eventual goal of fostering transboundary collaboration in the region. We seek high calibre PhD students to work with us in trying to understand atmospheric processes over the HKH. Since ICIMOD is not a degree granting institute, we seek students who are already enrolled in PhD programmes.

Research topics

ICIMOD is open to specific research questions/hypotheses within the following broad categories:

- Trace gases measurement/modelling
- Aerosol measurement/modelling
- Aerosol–cloud/monsoon interactions
- Regional and urban air quality modelling
- Persistent winter fog over the Indo-Gangetic Plain
- Emission characterization and inventory development
- Air pollution impacts on health, cryosphere, agriculture, and ecosystems
- Remote sensing technology for atmospheric science research

Terms and conditions

- Each PhD fellow needs to have an ICIMOD scientist serve officially as co-advisor, committee member, or equivalent.
- Data and knowledge products generated under this fellowship programme are subject to ICIMOD's data policy.
- The fellow must be based at ICIMOD headquarters or ICIMOD designated sites during the period of the fellowship.

Financial support

- Allowance of USD 1,000 per month up to a year while at ICIMOD or ICIMOD designated sites, plus reimbursement of pre-approved expenses up to USD 2,000.
- Travel support for the student to present work done with ICIMOD at one regional conference per year.
- Publication fee for one open-access peer-reviewed journal paper per year to communicate work done with ICIMOD, provided that ICIMOD scientist is a co-author on the paper.
- Travel costs for one roundtrip flight per year from the student's home institution to ICIMOD.
- Fellowship is renewable for a second year subject to candidate's performance and budget availability.

Requirements

ICIMOD aims to select two-thirds of the fellows from ICIMOD member countries and for half the fellows to be women. Fellowships will be linked to the Himalayan University Consortium (HUC).

The candidate should meet the following requirements:

- Citizen of one of the following countries: Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, Pakistan; or any international student currently doing research on atmospheric science in the HKH region.
- Preference will be given to HUC member institutions.
- Must be an admitted/registered PhD student.
- Letter of support from PhD supervisor or Head of Department is required once short-listed
- Candidates should be willing to work in an interdisciplinary team and have excellent analytical, technical, and communication skills.
- Must be willing to be based at ICIMOD headquarters or ICIMOD designated sites during the period of fellowship.

Procedure

Applications should be submitted online, complete with following documents:

- Cover letter describing the motivation to apply
- Preliminary proposal for research with ICIMOD (2-3 pages)
- Curriculum vitae, including information on education, research experience, and, if applicable, list of publications

Selection and award decisions will be made by a selection committee formed by the ICIMOD management. The ICIMOD management will decide which ICIMOD scientists will serve as co-supervisors.

Application deadline is 30 November 2016

Announcement of the awarded fellows will be made on 10 January 2017

Awarded fellows are expected to commence their fellowship no later than 1 March 2017