Research Scholar in hydroclimatology and climate impacts research

IIASA ENERGY, CLIMATE, AND ENVIRONMENT (ECE) PROGRAM

OVERVIEW:

The Integrated Assessment and Climate Change (IACC) Research Group within the Energy, Climate, and Environment (ECE) program at IIASA, is searching for two research scholars in hydroclimatology and climate impacts research. The successful candidate(s) will work with a team of international scientists to develop a growing suite of climate impacts models and indicators to improving understanding and representation of climate impacts on socioeconomic sectors such as energy, infrastructure, water resources, land, agriculture and vulnerable populations. The work will contribute to a better understanding of the magnitude of climate impacts and adaptation needs. In addition, focus will be on improved representation of climate impacts in various sectoral and integrated assessment models (IAMs). The role presents the opportunity to work on a variety of project types, such with European H2020 projects, with multi-lateral development organizations and national policy makers.

TASKS AND RESPONSIBILITIES

- Co-develop conceptual models of specific climate risks, including identification of relevant variables, methods, indicators, and necessary datasets.

- Processing of large volumes of multi-model gridded hydro-climate data into useful spatio-temporally consistent indicators and statistics, preferably in Python.

- Produce maps and visualisations to check results and communicate findings.

- Develop and document version-controlled code to easily re-process data and analysis for different datasets and spatial extents.

- Present methods and results to technical and non-technical audiences.

- Write up findings into reports and scientific papers.

- In line with the team spirit that prevails at IIASA, the incumbent may occasionally work on other tasks assigned by their superiors, that might not be directly related to this appointment but where the post holder has relevant experience and skills, and/or a shortage of immediate personnel capabilities requires such.

OUR REQUIREMENTS

- PhD degree (or equivalent) or master's degree (or equivalent) plus research experience in a related field of physical sciences, natural sciences, or engineering, such as: climatology, environmental sciences, hydrology, civil/environmental engineering.

- Knowledge of hydro-climate processes, climate change impacts, extreme events and transfer of risk onto socioeconomic sectors.

- Programming and data science experience is essential. Ideally you have experience in Python with packages including xarray, pandas, numPy, sciPy, sk-learn.

- Knowledge of commonly required statistical methods including distributions, regressions, percentiles and return-periods. Experience with extreme value theory, de-trending, timeseries analysis, statistical downscaling, bias-correction and machine-learning techniques is a plus.

- Experience working with large gridded geospatial datasets (e.g., NetCDF) such as from GCMs, RCMs, and gridded hydrological models.

- Experience running gridded hydrological models is a highly desirable.

- Experience in these areas of software application and development is desirable but not essential: Git; server/cloud computing; interactive data-viz e.g., JavaScript; GIS techniques.

  Fluency in English, good presentation skills and experience writing publications.

- IIASA offers an interdisciplinary and international workplace, and the possibility to interact with researchers of different nationalities, with strong ties to a world-wide network of research institutions engaged in environmental systems research. The successful candidate must be able to work in, and have respect for, an intercultural environment.

APPOINTMENT TERMS

The selected candidates should be available to take up the position in May/June 2021 or as soon as possible thereafter. We offer an initial fixed-term, full-time (40 hours per week) employment contract for one year, with the possibility of extension thereafter. Applicants wishing to work part-time hours will also be considered.

Duties will be carried out at the IIASA premises in Laxenburg, near Vienna in Austria.

This position is classified as a ''Scientific level'' post.

WE OFFER:

A **minimum** gross annual salary of EUR 40,000.00 (full-time).

The advertised salary is:

- Negotiable, based on the qualifications, skills and experience of the selected individual.

- Subject to deductions for health insurance and/or social security.

- Not directly comparable with other employers in Austria, due to the unique legal status and privileges granted to IIASA.

- Subject to the principle of income aggregation (Progressionsvorbehalt in German).

IN ADDITION:

- Educational subsidies for children of school age enrolled in private schools in Austria.

- A generous annual leave allowance.

- Moving and settlement allowances and paid home leave for employees in scientific and professional categories hired from international locations.

- Assistance for newcomers to Austria with visa, work and residency permit applications.

- Support finding accommodation in Austria.

Further details **here.**

About IIASA

IIASA is committed to a working environment that promotes equality, diversity, tolerance and inclusion within its workforce. This is reflected in our Core Values. We encourage qualified candidates, irrespective of gender, from all religious, ethnic, and social backgrounds to apply. In the case that candidates are equally qualified, preference will be given to applicants from countries where IIASA has a National Member Organization (NMO).

Further Information

For further information about this opportunity please contact:

Dr. Volker Krey, IACC Research Group Leader

For general information about working at IIASA, please contact:

Ms. Alia Harrison, Recruitment Coordinator

Applications

To apply for this opportunity, you will need to provide the following documents in English:

- **A cover letter outlining your motivation for and fit to the position**

- **A detailed Curriculum Vitae**

- **The names, addresses (including e-mail), and telephone numbers of two work-related reference givers.**

Review of applications will be ongoing until the post has been filled.

Deadline for receipt of applications: Until filled

APPLY