

Deadline: until filled



APPLY 32/2021

Research Scholar in energy access modeling and model integration

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 recruiting a research scholar in energy access modeling and model integration.

The successful candidate will work with a team of international scientists to develop and integrate a framework comprising several models in the topics of energy access, demand & electrification, crop water-use and water-energy-land nexus. With experience in energy access modeling, the selected candidate also has the responsibility of coordinating and integrating the other models into a common framework with a user-friendly platform that can be conveyed to the partners and passed on to the broader community through training groups.

The work will contribute directly to activities of the Horizon 2020 Consortium project LEAP-RE (Long-Term Joint EU-AU Research and Innovation Partnership on Renewable Energy).

TASKS AND RESPONSIBILITIES

- Design and develop an integrated systems analysis framework to couple various models in the topics of energy access, demand & electrification, crop water use, and water-energy-land nexus
- Coordinate data exchange and interoperability between the model teams
- Preparation of the framework for an open-source release through a variety of efforts including refactoring the source code, updating documentation, and expanding the code's test suite
- Publish relevant results in peer-reviewed journals and participate in scientific conferences and workshops
- Contribute to project deliverables, reports, stakeholder communication and capacity building activities
- 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

APPOINTMENT TERMS

- PhD degree, or a master's degree combined with relevant research experience in reduced-complexity climate model development
- Expertise working with large datasets processing and spatial analysis in R, Python and Google Earth Engine is essential
- Expert knowledge of the barriers and drivers of rural energy access in developing countries with expertise in sub-Saharan Africa, as well as awareness of other related development issues relating to food security and WASH
- Demonstrated expertise of numerical assessment and modeling of electricity access in developing countries using remote-sensing methods, including nighttime light imagery (e.g., VIIRS) and appropriate methods
- Demonstrated ability to contribute to open-source projects, data provision and code-development (Git)
- Capacity to take upon novel topics and lead them to successful completion within strict timelines
- Demonstrated ability to publish scientific articles and produce policy-relevant reports on model applications
- A degree of flexibility and willingness to travel
- Fluency in English and good presentation skills
- 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, and [IIASA core values](#).

The selected candidate should be available to take up the position as soon as possible. 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.

The corresponding profile for this opportunity is **R2** according to the [IIASA researcher profiles for research careers](#). IIASA does however, reserve the right to hire a researcher with a lower profile, and at a corresponding lower salary than the minimum stated below, if the qualifications and professional experience of the selected candidate do not meet the criteria described in the researcher profiles adequately.

WE OFFER:

A **minimum** gross annual salary of EUR 43,000.00 (full-time), which is exempt from income tax in Austria.

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