Deadline: until filled

APPLY 18/2021

Research Scholar/Modeler in Global Climate System

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 looking for two research scholars in modeling of the global climate system using the reduced-complexity climate model MAGICC.

The successful candidates 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 main tasks involve the further development and application of the MAGICC model as part of the Horizon 2020 Consortium Projects on Earth System Models for the Future (ESM2025) and European Climate and Energy Modelling Forum (ECEMF) projects, focusing on the on the following topics:

- Assessment of emissions scenarios.
- Emulation of comprehensive Earth System Model behavior.
- Synergies and tradeoffs between climate change mitigation action and biosphere constraints as represented within a reduced-complexity climate model framework.

TASKS AND RESPONSIBILITIES

- Assessment of emissions scenarios from a variety of sources including integrated assessment model output.
- Incorporation of automated emissions scenario assessment within the IIASA scenario explorer.
- Development of MAGICC's carbon cycle model to incorporate the latest carbon cycle understanding from comprehensive earth system model output into a reduced-complexity model framework.
- Preparation of MAGICC 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.

- 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 a master's degree combined with relevant research experience in reduced-complexity climate model development.
- Experience with reduced-complexity climate model development.
- Experience with large datasets processing and spatial analysis (Python or equivalent).
- High-level of proficiency in the Python and FORTRAN programming languages.
- Demonstrated ability to contribute to open-source projects, including a demonstrated understanding of software testing.
- 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.

APPOINTMENT TERMS

Selected candidates should be available to take up the positions as soon as possible. We offer Initial fixed-term employment contracts for two years, with the possibility of extension thereafter.

We offer full-time (40 hours per week) positions; however, part-time appointments 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 44,472.00 (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