

GAMS modeler

INTEGRATED BIOSPHERE FUTURES (IBF) RESEARCH GROUP

The IBF Research Group, part of the IIASA Biodiversity and Natural Resources (BNR) Program, is offering an opportunity for a GAMS (General Algebraic Modeling Language) software expert who will support the implementation of IBF models.

BACKGROUND

The IBF Research Group adopts an integrated approach to sustainable land use and ecosystems modeling taking into account i) interactions between different economic sectors, including agriculture, forestry, bioenergy, and fisheries, ii) synergies and trade-offs between multiple societal objectives, including, but not limited to, GHG emissions and climate change mitigation, climate change impacts and adaptation, food security, sustainable nutrient and water management, and biodiversity, iii) across different spatial and temporal scales, going from pixel through the country level up to the global scale, and from annual to a hundred year time horizon.

The group is strongly connected to the international academic community, placing emphasis on transdisciplinary synergies, and applied approaches. The work accomplished has long been recognized through regular publications in high-ranking scientific journals, and the BNR Program includes several Top 1% highly cited researchers. In addition, BNR is recognized as a reliable partner in support of national policy making and international multilateral processes.

THE POSITION

The successful candidate will work with and support a large multi-disciplinary and multi-cultural team of researchers to maintain, further develop, and continuously enhance the code base of the IBF modeling system.

MAIN TASKS AND RESPONSIBILITIES

- Maintain and continuously update model code and structure to take full advantage of the GAMS software language.
- Continuously improve the implementation efficiency of the models.
- Lead the code documentation.
- Provide hands-on technical GAMS support to (junior) colleagues and the wider GLOBIOM modeling community, incl. developing of training materials.
- Develop and enforce good coding practice guidelines together with senior modelers.
- Support integration of BNR models by adapting their code base and creating necessary interfaces.

• 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.

REQUIREMENTS

- Min. master's degree (or equivalent) in Operations Research, Industrial Engineering, Applied Mathematics, Computer Science, or other relevant discipline.
- Proven GAMS software proficiency.
- Commend of other programming languages such as R or Python is an advantage.
- Experience with large scale applied economic models, either at sector level or in the general equilibrium framework is an asset.
- Demonstrated ability to deliver high-quality results independently and within set timelines
- Exceptional problem-solving skills and commitment to continuous learning.
- Excellent command of English, both in spoken and written form.
- 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.

APPOINTMENT TERMS

The selected candidate should be available to take up the position as soon as possible in 2024 (start date negotiable). We offer an initial fixed-term, two-year, fulltime (40 hours per week) employment contract, with the possibility of extension thereafter. Eligible applicants wishing to work part-time hours may be considered.

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

The successful candidate will be appointed in accordance with either the IIASA profiles for research careers or research software professionals.

WE OFFER

- An international atmosphere and pleasant working environment in a historic market town surrounded by green areas.
- The possibility to contribute to environmental sciences for sustainability and global wellbeing.
- The opportunity to deepen and improve knowledge and scientific profile.
- Career development perspectives.
- An attractive salary which is exempt from income tax in Austria and negotiable, based on the qualifications, skills and experience of the selected individual and <u>at least:</u> EUR 51,894.00 gross per annum.

IIASA SALARIES ARE

- 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).

OTHER BENEFITS

- Educational subsidies for children of school age enrolled in private schools in Austria.
- A generous annual leave entitlement.
- Relocation allowances and paid home leave for

employees in scientific and professional categories hired from international locations.

- The possibility to work up to 100 days per year in home office (within Austria)
- 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 <u>IIASA core</u> <u>values</u>. We encourage qualified candidates 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 <u>Member Organization</u>.

Further Information

For further information about this opportunity please contact Michael Le Gohebel, BNR/IBF Program and Project Officer or Petr Havlik, BNR Program Director/IBF Research Group Leader.

For general information about working at IIASA, contact: <u>recruitment@iiasa.ac.at</u>

Applications

In order to apply for this opportunity, you will need to provide the following documents:

- 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.

Deadline for receipt of applications: 15 May 2024

