

APPLY 32-2024

PhD Scholar - Resource Inequality & Wellbeing Implications

The IIASA [Energy, Climate, and Environment \(ECE\) Program](#) and the [Institute of Social Ecology at BOKU University](#) announce an open PhD researcher position to join a new interdisciplinary research project 'Resilience and Malleability of Social Metabolism' ([REMASS](#)), a five-year collaboration among six leading Austrian research institutions, funded by the Austrian Science Fund. REMASS aims to investigate the impacts of global supply chain disruptions – caused by factors such as wars, pandemics, and climate extremes – on resource use, inequality, and social wellbeing. This is a research-focused position primarily based at IIASA in Austria, under the co-supervision of experts at both IIASA and BOKU.

BACKGROUND

The IIASA [Energy, Climate, and Environment \(ECE\) Program](#) is one of the leading scientific research groups working on an integrated assessment of climate change and energy systems transitions to achieve the globally agreed Sustainable Development Goals (SDGs). IIASA has a long-standing tradition in the development of scenarios to identify strategies for climate mitigation and has spearheaded research on eliminating energy poverty through providing equitable access to energy and material services that are essential to decent living and to building climate resilient futures.

The PhD would be granted through the [Doctoral School Social Ecology](#) at BOKU University, following their prerequisites, with the main supervisor appointed through its [faculty](#), and co-supervision by IIASA scientists.

POSITION OVERVIEW

The successful candidate will primarily work on the cutting-edge REMASS research project, exploring themes related to inequalities in global socioeconomic metabolism, the resilience of global supply chains and the wellbeing impacts of alternate provisioning systems. The research will use input-output analysis, econometrics, and data science methods more generally, alongside normative theories of wellbeing including the Decent Living Standards to explore these themes. The candidate will specialize in one or more of these methods and research themes.

MAIN TASKS AND RESPONSIBILITIES

- Inequality analysis: Develop and apply methods to compare within-country and cross-country production and consumption inequalities, their material underpinnings and wellbeing outcomes.
- Data processing: Process various datasets, including IO tables, trade databases, consumption data, and income data, to create a comprehensive picture of production and consumption inequalities.

- Socio-metabolic analysis: Develop and apply approaches to analyze the trade-offs and substitutability of different materials within consumption categories to assess reliance to shocks. Capture the socio-economic and environmental impacts of metabolic transitions and possible disruptions. Assess the material and resource footprints of alternative provisioning systems and their wellbeing impacts.
- Regional and national case studies: Study the transition of resource-endowed countries from extractive models to the development of local downstream industries.
- Publication and dissemination: Publish research findings in peer-reviewed journals and present at international conferences. Contribute to project reports, stakeholder communication, and capacity-building activities.

SKILLS, QUALIFICATIONS AND EXPERIENCE

- Educational background: Excellent master's degree in ecological economics, environmental science, engineering, or related interdisciplinary sustainability sciences.
- Technical skills:
 - Demonstrated expertise in data analysis, with proficiency in relevant software and programming languages (e.g., R, Python).
 - Experience in handling large socioeconomic datasets.
 - Experience with modern tools and concepts related to scientific software development is an asset, including version control, unit testing, continuous integration, and (automated) documentation.
- Research experience:
 - Background in studying production and consumption inequalities and/or supply chain impacts.
 - Some experience in working with theories of wellbeing and provisioning systems would be an advantage.
 - Demonstrated experience in academic writing and publishing.
- Other qualifications: Fluency in English and excellent 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](#).

APPOINTMENT TERMS

The successful candidate should be available to take up the position in October 2024. We offer an initial fixed-term, full-time employment contract for one year, with the possibility for 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 (with course work and co-supervision at the Institute of Social Ecology at BOKU University in Vienna).

The successful candidate will be appointed in accordance with the [IIASA profiles for research careers](#).

WE OFFER

- The possibility to contribute to environmental sciences for sustainability and global wellbeing.
- Career development perspectives.
- An international atmosphere and pleasant working environment in a historic market town surrounded by green areas.
- 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 *at least* EUR 39,825.00 gross per annum (subject to deductions for health insurance and/or social security).

IIASA salaries are:

- 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 [IIASA core values](#) and the [IIASA Gender Equality Plan \(GEP\)](#). 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 [Member Organization](#).

Further Information

For further information about this opportunity please contact:

[Shonali Pachauri](#), Research Group Leader, Transformative Institutional Social Solutions (TISS) Research Group

For general information about working at IIASA, please contact: recruitment@iiasa.ac.at

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.
- Examples of your work (e.g., a scientific manuscript, R or PYTHON script, etc.)
- The names, addresses (including e-mail), and telephone numbers of two reference givers.

Review of applications will begin immediately and continue until the position has been filled.

Deadline for receipt of applications: until filled

APPLY