

Vienna, 1.9.2017

WU offers the following position

PostDoc position for Geographer/Geo-Informatics

**for the geospatial assessment of global raw material extraction
and related environmental and social impacts**

Position initially limited to 3 years; 30-40 h/week
Starting on January 1st, 2018
Gross monthly salary (full-time basis): 3,627 € (14 salaries/year)

Background

The research group "Sustainable Resource Use" at the Institute for Ecological Economics of WU Vienna is one of the leading European groups in the areas of natural resource accounting and indicators, modeling, and assessments focusing on materials, water, and land use.

This position is part of the **ERC Consolidator Grant project FINEPRINT** (Spatially explicit material footprints: fine-scale assessment of Europe's global environmental and social impacts), led by Dr. Stefan Giljum. FINEPRINT develops and applies a new method for fine-scale assessments of global material flows, in order to perform spatially explicit analyses of material footprints and related environmental and social impacts of European consumption.¹

Responsibilities

You will be **leading Work Package 1 of the FINEPRINT project**, which will perform world-wide geospatial assessments of raw material extraction and related environmental and social impacts. You will be responsible for establishing an integrated and consistent framework of detailed spatial accounts of material extraction (of at least 60 different raw materials including agricultural, forestry and fishery products, fossil fuels, metal ores and non-metallic minerals) and related environmental and social data (e.g. deforestation, species occurrence, water scarcity, social conflicts). Together with the other members of the WP 1 team, you will collect, validate and quality-control a large number of spatial and non-spatial global and regional datasets with a variety of data formats. Your tasks will also include the production of global crop and forest harvest maps based on, e.g. available land use and crop suitability data. You will then perform quantitative-statistical and qualitative analyses of the relations between trends and patterns of raw material

¹ See <https://www.wu.ac.at/en/ecocon/research/sustainable-resource-use/erc-fineprint> for more information about the FINEPRINT project.

extraction and related environmental impacts, such as water scarcity and deforestation, as well as social impacts, such as local conflicts related to mining projects.

As WP 1 leader, you will head a small research team, consisting of 1-2 pre-doc researchers, a technical assistant as well as a research assistant. You will also work closely with the members of the overall FINEPRINT team, consisting of a total of 9 persons.

You are expected to publish scientific results in high-impact journals.

In addition to research, teaching activities on the bachelor level might be arranged.

The post holder will also be invited to contribute to the writing of grant proposals that, when successful, might provide funding to achieve full-time employment and to extend the post-doc position to a period longer than three years.

Your profile

Applicants should have:

- A doctoral degree or PhD in Geography, Geo-Informatics or related subjects. (We also want to encourage experienced Pre-Doc applicants, who meet the requirements of the announced position.)
- Profound experience in handling and automated processing of large-scale, global (geo)data (sources, structure, data types, quality evaluation, scripting/programming in R, Python or other languages).
- Experience in building and working with (geo)databases.
- Strong skills in the area of spatial statistics (e.g. cluster analysis, multivariate regression).
- Interest in assessing and ability to grasp the interrelations between raw material extraction and related impacts.
- Excellent written and communication skills in English (knowledge of German welcome but not required).

Applications are accepted until November 1, 2017.

Note that a slightly different starting date could be negotiated.

All applications should include:

- Cover letter describing your motivation, research interests & relevant experience
- Detailed curriculum vitae in tabular form
- A sample of your work representative for the job description

Reference Number: 3439

Candidates must apply through the WU online system:

<https://www.wu.ac.at/en/careers/careers-at-wu/current-job-openings/>

Travel and lodging expenses:

We regret that WU cannot reimburse applicants for travel and lodging expenses incurred as part of the selection and/or hiring process.

Equal opportunities:

WU is an Equal Opportunity Employer and seeks to increase the number of its female faculty and staff members, especially in management positions. Therefore qualified women are strongly encouraged to apply. In case of equal qualification, female candidates will be given preference. WU has established a Committee for Equal Treatment, which is involved in all selection proceedings pursuant to § 42 of the 2002 Universities Act.