

VACANCY NOTICE – 2024-IPR-D3-FGIV-025181 Project Officer – Soil Scientist

Type of contract	Member of the European Commission's contract staff, Function Group IV (article 3b of the Conditions of Employment of Other Servants)
Duration of contract	12 months (renewable up to maximum 6 years)
Area	ENVIRONMENT and its PROTECTION - SOIL SCIENCE
Place of employment	Ispra (IT)
Indicative basic salary	3943,39 - 5711,77 € (applicable as of 1 st of January 2024) For more detailed information please consult: Working Conditions

WE ARE

The <u>Joint Research Centre (JRC)</u> provides independent, evidence-based knowledge and science, supporting EU policies to positively impact society.

The current vacancy is in the Directorate for Sustainable Resources. Its mission is to provide independent scientific evidence to support the development, implementation, evaluation and coherence of EU policies, mainly in the areas of agriculture and rural development, international development cooperation, environment and climate change, blue growth and fisheries, the bioeconomy, industry and trade.

The vacancy is within the Land Resources & Supply Chain Assessments Unit, which has the mission is to provide science-based knowledge and to support policies aimed at balancing competing demands for land resources and natural capital whilst securing sustainability of production and consumption systems in a life cycle approach. To support understanding the interaction between humans and the biosphere in an integrated manner, both at micro and macro scale, focusing on raw materials, ecosystem services, and land condition and management, along with how these respond to changing environmental, societal and economic conditions. To support the sustainable management of terrestrial resources along supply chains and across economic sectors.

The post is located in Ispra. More detail can be found at: https://esdac.jrc.ec.europa.eu/

The EU and Africa have identified the need to boost safe and sustainable agri-food systems, and healthy soils are key for achieving this ambition. The AFSOH project addresses the following research questions: (1) How healthy are agricultural soils in Africa (2) Which soil functions are at risk and what are the major threats, and (3) Which measures should be taken to improve soil health (e.g. soil organic carbon, soil biodiversity, etc), taking into consideration the specific environmental and socio-economic context on the African continent.



We offer a position to lead and carry out the scientific research in the project "Quantifying and improving soil health in Africa" (AFSOH), with a focus on three major soil functions:

- 1) Carbon sequestration in the context of climate change
- 2) Soil biodiversity and habitat provision
- 3) Productivity in the context of food security and malnutrition;

We offer:

High-quality working conditions in a dynamic environment. Working in a multidisciplinary and multicultural team, the successful candidate will have a unique opportunity to support EU policies and contribute to JRC's research agenda. The JRC encourages interactions with policy makers, academics and other leading stakeholders active in the field, including participation in (international) conferences and workshops.

Please see also Working at the Commission – conditions and environment (europa.eu)

WE PROPOSE

A position within the research project "Quantifying and improving soil health in Africa" (AFSOH).

The successful candidate will engage into the following activities within the AFSOH project:

- Design innovative methods to translate soil data into soil health indicators, with the help of models and remote sensing data;
- Model soil organic carbon with data driven approach (e.g. Digital Soil Mapping) or Biochemical models (e.g. DayCent, Century or equivalent) for Africa
- Assess the importance of soil biodiversity through statistics applied in ecology or bioinformatics (e.g. metagenomics, meta-barcoding)
- Exploration of existing data repositories to select appropriate and available soil measurements for the above-mentioned soil functions;
- Write, publish and present scientific papers;
- Explain the research activities and achievements to third parties, such as scientific communities and African partners;
- Provide feedback and interactive communication with colleagues and project leaders

WE LOOK FOR

We are looking for a scientist with the following **essential** qualifications:

- A PhD degree in biology/ecology, soil science, earth sciences, environmental sciences or agricultural sciences OR at least 5 years job-related experience in biology/ecology, bio-informatics and statistics, soil science, carbon modelling, earth sciences, environmental sciences or agricultural sciences;
- A high level of written and oral English (C1) is required.

The following qualifications are considered an **advantage**:

- Previous research or professional in the field of soil surveys, soil monitoring, (spatial) modelling or soil analyses;
- Solid record of research activities including publications on soil carbon sequestration, biomass productivity or soil biodiversity, in international peer-reviewed journals.



- Experience in soil research in Africa related to soil biodiversity, soil organic carbon sequestration or soil fertility in the context of food production;
- Excellent knowledge of programming languages (R or Python) and GIS applications (e.g ArcGIS or similar open source)
- Knowledge of process based models in carbon cycle (e.g. Daycent, Centrury or equivalent)
- Experience in statistics applied in ecology, bio-informatics, metagenomics or metabarcoding (DNA)
- Ability to work in a team and in a multi-cultural environment;

The candidate is expected to be creative and work independently.

HOW TO APPLY

If you are already on a valid CAST FG IV reserve list, or you have already applied to one of the calls below, you can directly submit your application at http://recruitment.jrc.ec.europa.eu/?type=AX.

If not, before applying to this position, **you must register** for one of the two following:

- the <u>Call for Expressions of Interest | EU Careers (europa.eu)</u> (CAST Permanent FG IV), which is used by a wide range of organisations (institutions, bodies, offices and agencies of the European Union), or
- the <u>specialised call for researchers</u> (JRC Call COM/1/2015/GFIV Research), which is mainly used by the JRC.

Note that each of the calls above has different minimum eligibility requirements and different selection tests.

The JRC cultivates a workplace based on respect for other people and the environment, and embraces non-discriminatory practices and equality of opportunity. In case of equal merit, preference will be given to the gender in minority.