2021-IPR-A5001-FGIV-016728

# FG IV - SCIENTIST - EXPLORATORY RESEARCH PROJECT - Understanding the links between SOil pollution and CancEr" (SOLACE)

#### **POSITION AS:**

Member of the contract staff FGIV – art. 3b of the Conditions of Employment of Other Servants <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1962R0031:20110101:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1962R0031:20110101:EN:PDF</a>)

#### WE ARE:

As the science and knowledge service of the Commission, the mission of DG Joint Research Centre (JRC) is to support EU policies with independent evidence throughout the whole policy cycle. The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain).

Further information is available at: <a href="https://ec.europa.eu/jrc/">https://ec.europa.eu/jrc/</a>

The JRC offers a vacancy for a Contract Agent within the Exploratory Research Project "Understanding the links between SOil pollution and CancEr" (SOLACE). The JRC Exploratory Research Programme (ER) is a strategic initiative characterised by ideas that might lead to novel results and qualitatively enrich current JRC scientific work.

The vacancy is within the Directorate for Sustainable Resources. The directorate supports the relevant policy DGs with independent, technical and scientific evidence in the areas of environment, natural resources and sustainability. The operational scientific research will take place in the Land Resources unit. Further information is available at: https://esdac.jrc.ec.europa.eu/projects/solace

The Scientific Development unit is in charge of the overall JRC Exploratory Research Programme.

#### WE PROPOSE:

A position to carry out scientific and technical tasks in accordance with the Exploratory Research Project "Understanding the links between SOil pollution and CancEr" (SOLACE) with special emphasis on the investigation of the potential relationship between the occurrence of specific cancers and levels of soil pollution. The project aims to develop a methodology that moves from measures of concentrations of substances in soil towards the identification of hazards and risk analysis that may explain eventual potential pathways that cause cancers (i.e. soil-plant-food, erosion by wind and water, etc.). The activity will strengthen activities in the JRC in relation to health, soil and food security by bringing together the activities such as EU Soil Observatory, the Knowledge Centre on Cancer, IPCHEM, and the Digital Rural Landscape Laboratory. Specifically, the successful candidate will develop diverse datasets that describe the conditions that facilitate soil-plant-food pathways for selected pollutants with known carcinogenic properties.

The successful candidate will be in charge of:

- Assessment of soil diffuse pollution initial focus will be on metals (e.g. Cadmium, Arsenic, Zinc, Lead, Nickel), but scope to extend to other substance (e.g. plant protection products, industrial chemicals):
- Spatial mapping of outcomes (including predictive considerations);
- Contribution to better understanding of soil-plant uptake of pollutants;
- Development of soil-food flows from satellite derived crop maps;
- Provide regular and accurate reports on scientific activities every twelve months and a final report;
- Report to the Project Leader on progress, achievements and potential problems in a timely manner:
- Provide feedback and maintain interactive communication with colleagues;
- Explain the research activities and achievements to third parties, such as scientific communities and the general public;

• Write, disseminate and publish results, among other, in peer-reviewed journals.

#### WE LOOK FOR:

A scientist with the following qualifications:

- A doctoral diploma in Soil or Environmental Sciences or related field, alternatively completed university studies of at least three years attested by a diploma and at least five years professional experience in a field relevant to the position;
- Extensive knowledge/experience in diffuse soil pollution is essential;
- Broad hands-on knowledge in handling large environmental datasets (e.g. associate crop sequences with EU soil pollution data), geospatial data integration and analysis, as well as (geo)statistical analysis and modelling (e.g. in R) and coding skills to handle large datasets (e.g. in Python) is essential;
- Broad knowledge of soil-plant pollutant pathways or impact of pollutants on human health is an advantage;
- Solid record of research activities relevant for the position including publications in international peer-reviewed journals is an advantage;
- Good oral and written communication skills in English (B2) are essential, knowledge of other languages is an advantage.

In addition, the following competences will be considered as an advantage:

- Ability to work in a team and in a multi-cultural environment;
- The candidate is expected to be creative and work independently.

## EMPLOYMENT CONTRACT DURATION:

24 months employment contract for the Exploratory Research project "Understanding the links between SOil pollution and CancEr" (SOLACE).

Employment contracts for Contract Agents can be renewed for maximum 6 years.

## PLACE OF WORK:

Ispra, Italy

# **RULES AND ELIGIBILITY:**

To be eligible for the position, the candidate must be on a valid EPSO reserve list for Function Group IV contract staff

You can be added to an EPSO reserve list if you complete successfully an EPSO selection procedure.

Candidates who are on a valid EPSO reserve list or have applied to an EPSO selection procedure can apply to this specific position through <a href="http://recruitment.jrc.ec.europa.eu/?type=AX">http://recruitment.jrc.ec.europa.eu/?type=AX</a>.

## How to apply to an EPSO selection procedure?

Apply either to the permanent EPSO call (CAST Permanent) <a href="https://epso.europa.eu/documents/2240\_en">https://epso.europa.eu/documents/2240\_en</a> or a specialised call for researchers <a href="https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-IV-researchers">https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-IV-researchers</a>

The CAST Permanent reserve list is used by a wide range of organisations (institutions, bodies, offices and agencies of the European Union), whereas the specialised reserve list for researchers (JRC Call COM/1/2015/GFIV – Research) is mainly used by the JRC.

## **RECRUITMENT POLICY:**

The JRC

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