VACANCY NOTICE FOR A CONTRACT AGENT SELECTION

Job title	**FGIV - Project Officer - Scientific / Technical Support- Exploratory Research Project AI & Quantum Computing for Spatial Applications**
Reference	EC-2026-JRC-529519
Application deadline	**14/12/2026 - 12.00 (noon, Brussels time)**
Directorate-General (full name)	Joint Research Centre (JRC)
Unit	Economics of Food Systems Unit
Place of assignment	Seville, Spain
Domain	Science and Research
Contract type and Function Group	Contract Agent 3b FGIV

About us

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

The current vacancy is within Economics of Food Systems Unit of the Directorate for Sustainable Resources. The unit's work focuses on the socio-economic analysis of agricultural, environmental, climate change, and trade policies in the EU, the further development of the European green and competitive economy, as well as food security and related policies in third countries.

The policy support provided by our unit is grounded in quantitative economic research, drawing on agro-economic modelling tools and advanced statistical and econometric techniques. The unit has access to unique and high-value datasets, including large-scale agricultural, environmental, micro- and macroeconomic data, which constitute a key asset for advanced machine learning, statistical modelling, and AI applications in support of policy analysis.

The Unit Centre for Advanced Studies oversees the overall JRC Exploratory Research Programme.

The successful candidate will contribute to the **Exploratory Research Project 'Quantum Allocation for Land and Strategic autonomy' (EQUALS)**, which assesses whether the EU can achieve its goals for agriculture, nature and climate at the same time. The work will involve integrating spatial datasets, including Earth Observation-derived land cover and land use products for model calibration and validation. The candidate will build and test models that allocate land to different uses under combined policy targets and will apply machine learning to predict how suitable areas are for land uses. A central question of the project is whether quantum computing techniques can solve these highly complex planning problems better than

classical methods. The candidate will benchmark quantum, quantum-inspired and classical approaches, running experiments on hybrid high-performance and quantum computing infrastructure. The findings will give EU policymakers a clearer picture of whether the targets set for agriculture, nature and climate can realistically be met together, and where trade-offs may arise.

About the role

We offer a dynamic multicultural and multidisciplinary work environment in Seville, Spain, with the opportunity to join the Exploratory Research Project EQUALS. EQUALS brings machine learning and quantum and quantum-inspired optimisation to spatial applications, to assess whether EU land use policies are coherent and achievable.

The project starts from a simple question: before deciding which piece of land should be used for what, can all the policy targets the EU has set for agriculture, nature and climate be reached at the same time? By revealing where policy goals conflict, EQUALS will give policymakers a clearer picture of land sufficiency and strategic autonomy, while helping the Commission build up expertise in quantum technologies. Quantum and quantum-inspired algorithms will also be tested head-to-head against classical ones, contributing to the wider question of whether quantum computing offers a real, practical advantage for policy problems.

The successful candidate will work in a dynamic team alongside leading European partners in supercomputing and quantum technologies, with access to hybrid high-performance and quantum computing infrastructure, in a collaborative setting with flexible working arrangements and occasional travel. The position offers strong prospects for high-impact scientific publications, attractive remuneration, a comprehensive welfare package and broad insurance coverage. Please see also Working at the European Commission

The jobholder will carry out scientific and technical tasks within the Exploratory Research Project EQUALS.

S/he will contribute to:

- Write programming code, develop machine learning models and integrate large spatial datasets to train, test and validate models;
- Turn land use allocation questions (which land should be used for what) into mathematical optimisation problems, translating policy targets and constraints into the model so that it can be tested whether they can all be met at the same time;
- Run tests comparing quantum and quantum-inspired computing methods with classical ones, using high-performance and quantum computers, and assess how quantum and classical machine learning approaches perform in predicting how suitable areas of land are for particular uses;
- Produce policy-relevant evidence through feasibility, scenario and impact assessments, reporting all results transparently (including cases where quantum methods show no advantage);



• Contribute to drafting scientific publications, policy reports and summaries for policymakers, and liaise with project partners and stakeholders.

Qualifications, experience and skills

We are looking for a researcher who can bring together machine learning and quantum and quantum-inspired optimisation for spatial applications, in support of the analysis of EU agricultural, environmental and climate policies. Given the multidisciplinary nature of the role, we welcome applications from candidates with diverse academic and professional backgrounds who meet the essential requirements, even if their experience does not cover all areas of the position.

The selected ideal candidate should have:
• A Ph.D. in Geospatial Data Science, Applied Mathematics, Computer Science, Physics, Environmental Sciences, Agricultural Sciences, Statistics or a related field. Alternatively, completed university studies of at least three years attested by a diploma and at least five years of professional experience in a field relevant to the position;
• Experience in applying AI/machine learning, statistical modelling and data analysis;
• Strong programming skills (Python and/or R, bash scripting, code repositories such as Git);
• Knowledge of quantum computing or quantum-inspired optimisation, demonstrated through studies, training, projects or publications;
• An analytical mindset and solid modelling skills to make sense of complex problems and to draw robust conclusions and recommendations from them;
• A very good level of written and spoken English (C1).

In addition, the following competences will be considered an advantage:
• Experience in processing and analysing large geospatial, environmental and/or economic datasets;
• Experience with high-performance computing environments;
• Experience with land use, agricultural or environmental modelling;
• Good understanding of EU agricultural, environmental or climate policies and of the trade-offs between economic, environmental and social dimensions of land use;
• Ability to work in a team and in a multicultural, multidisciplinary environment.

The candidate is expected to be creative and to work independently.

How to express your interest?

Please submit your application via the JRC Recruitment Portal.

Being registered for at least one of the two following databases is also necessary:

- the Selection process for contract staff | EU Personnel Selection – EU Careers (EPSO CAST FG IV), which is used by a wide range of organisations (institutions, bodies, offices and agencies of the European Union), or



- the JRC Open Call for Researchers, (JRC Call COM/1/2015/GFIV – Research), which is mainly used by the JRC.

Eligibility

For eligibility please consult this page with all the information needed.