



2022-IPR-E1-FGIV-021028

**FG IV - Scientific Project Officer – Flood hazard and risk modelling**

**POSITION FOR:**

Member of the contract staff FGIV – art. 3b of the Conditions of Employment of Other Servants

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1962R0031:20110101:EN:PDF>

**WE ARE:**

As the science and knowledge service of the Commission, the mission of DG Joint Research Centre 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: <https://ec.europa.eu/jrc/>

The current vacancy is in the Disaster Risk Management Unit of the Directorate for Space, Security and Migration which provides scientific and technical support to EU policies addressing global security and crisis management.

Quantifying flood hazard and risk is an essential component of prevention, emergency response, and risk mitigation. The EU Floods Directive recognizes flood hazard and risk maps as key element for priority setting and further technical, financial and political decisions regarding flood risk management. Furthermore, flood hazard and risk maps are also key in assessing the impacts of climate change on future flood risk in Europe and globally.

The JRC has been developing continental and global scale flood hazard and risk mapping methodologies to support policies such as the Floods Directive, the Union Civil Protection Mechanism, the EU Solidarity Fund or the EU Adaptation Strategy. New initiatives such as the Green Deal or the EU Mission on Adaptation to Climate Change request an increased effort in improving climate resilience.

**WE PROPOSE:**

A position as flood hazard and risk modeller to contribute to the further development of Continental and Global scale flood hazard and risk assessment activities. Primarily s/he will develop and apply innovative methods and new data for improving flood hazard and risk maps. S/he will be part of the team that is responsible for policy support in the field of flood risk management as well as the management and further evolution of the Copernicus Emergency Management Service. The selected candidate will:

- Further improve the continental and global scale flood hazard and risk maps by applying state-of-the-art methods and data (e.g. improvements in the hydrodynamic model or underlying data) or develop new approaches (e.g. usage of machine learning)
- Contribute to the building of a global flood impact database
- Contribute to the assessment of the impacts of climate change on future flood risk in Europe and globally
- Support the assessment of EU Solidarity Fund applications in relation to floods
- Contribute to the scientific output and to the knowledge transfer activities through peer reviewed publications as well as by sharing outputs in the Disaster Risk Management Knowledge Center

**WE LOOK FOR:**

The ideal candidate has a university degree (M.Sc. or comparable) in a relevant scientific area (atmospheric/geo/hydrologic /natural sciences, environmental engineering) together with a minimum of 3 years of research experience or a Ph.D in the relevant scientific area.

The following skills are essential:

- Advanced experience in flood hazard and risk mapping using hydrodynamic models

- Experience in Geographic Information Systems (GIS) and spatial analysis
- Experience in handling and analysing large-scale spatially distributed datasets
- Good programming skills, in particular Python, R and UNIX shell
- Basic experience in machine learning methods, in particular deep learning

The candidate should have a proven track record of peer reviewed scientific publications.

Any of the following skills are an advantage:

- Experience in statistical analysis and time-series analysis
- Experience in remote sensing

Personal attributes:

- Good communication skills (verbal and written) in English (minimum B2)
- Good interpersonal skills with demonstrated ability to work in a team and be willing to learn and adapt to new tasks
- Ability to work to deadlines and pay attention to detail even under time pressure

**INDICATIVE CONTRACT'S DURATION:**

36 months initial contract with possible renewals up to maximum 6 years.

**PLACE OF WORK:**

Ispra (IT)

**ELIGIBILITY CRITERIA:**

Candidates for this contract agent post shall:

– (i) have passed a valid EPSO CAST selection procedure;

or

– (ii) be registered in the EPSO Permanent CAST <https://epso.europa.eu/en/documents/call-expressions-interest-0>

or

- (iii) be registered in the specialised call for researchers [https://joint-research-centre.ec.europa.eu/working-us/jobs-jrc/temporary-positions/contract-staff-members/function-group-iv/job-opportunities-research-fellows-european-commission\\_en](https://joint-research-centre.ec.europa.eu/working-us/jobs-jrc/temporary-positions/contract-staff-members/function-group-iv/job-opportunities-research-fellows-european-commission_en) (used mainly by the JRC).

With a valid application number to one of the above, you may then apply for this specific vacancy at JRC through: <http://recruitment.jrc.ec.europa.eu/?type=AX>.

**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.