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 http://ec.europa.eu/jrc/

The JRC offers a vacancy for a Contract Agent within the Exploratory Research Project THERMOPOLIS (THERmal MOonitoring for urban climate adaptation POLIcieS).

The JRC Exploratory Research Programme (ER) is a strategic initiative characterised by ideas that might lead to novel results to qualitatively enrich current JRC scientific work.

The vacancy is within the Sustainable Resources Directorate. The directorate supports the relevant policy DGs with independent, technical and scientific evidence related to the sustainable use of resources, encompassing environmental, economic and social dimensions. The operational scientific research will take place in the Bioeconomy Unit. The Scientific Development unit under the Directorate for Strategy and Work Programme Coordination is in charge of the overall JRC Exploratory Research Programme.

The ER Project THERMOPOLIS will explore the synergy between diverse existing remotely sensed thermal data and sophisticated computational systems, with the vision to build an advanced heat stress risk-monitoring framework for the urban context. The specific goal is to produce a database of thermal fingerprints for European and African cities based on a novel temperature dataset constructed from the fusion of different complementary products. This will become the baseline for a tool to assist city planners in designing and deploying climate mitigation and adaptation strategies and assessing their efficiency.

The successful candidate will be in charge of:

- Exploring how data produced from thermal remote sensing and developed within THERMOPOLIS can serve to characterise the heat patterns between different neighbourhoods within cities;
- Making a large scale analysis to identify which cities in Europe and Africa are more vulnerable to heat stress based on this novel data;
- Prototyping a tool to monitor urban heat stress across
European and African cities using this novel data;
- Dissemination/publication of results.

Qualifications:
Essential:
- 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, alternatively a doctoral diploma in physics, statistics, civil or environmental engineering, architecture, urban planning or related field;
- Broad knowledge/experience in geospatial data analysis;
- Experience in writing quality scientific publications.

Advantage:
- Broad knowledge of heat stress in the urban context;
- Knowledge of thermal remote sensing;
- Experience in manipulating geospatial data at city scale level;
- Solid record of research activities relevant for the post including publications in international peer-reviewed journals.

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.

The Joint Research Centre is an equal opportunity employer and is committed to increasing the diversity of its staff. It welcomes applications from women and minority groups.

**Directorate Unit**

Sustainably Resources Bioeconomy

The Scientific Development Unit of the Directorate for Strategy and Work Programme Coordination is in charge of the overall JRC Exploratory Research Programme.

The scientific research will take place in the Sustainable Bioeconomy Unit in Ispra (Italy).

Exploratory Research Project:
THERmal MONitoring for urban climate adaptation POLIcieS (THERMOPOLIS)


**Indicative Duration**

12 months
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<th>JRC Site</th>
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**Rules and eligibility**

The candidate must be on a valid EPSO reserve list for Function Group IV contract staff.

If you are not in any valid EPSO reserve list for Function Group IV contract staff, you can still apply by following these steps.

You express your interest by applying to the CAST Permanent or to the permanent JRC Call for researchers.

1. CAST Permanent: open-ended selection procedure to create a pool of candidates from which the institutions, bodies, offices and agencies of the European Union (EU) can recruit contract agents. [https://epso.europa.eu/documents/2240_en](https://epso.europa.eu/documents/2240_en)


Only then you can apply for this specific position, through [http://recruitment.jrc.ec.europa.eu/?type=AX](http://recruitment.jrc.ec.europa.eu/?type=AX)

**Auxiliary contract staff:**

Article 3b of the Conditions of Employment of Other Servants of the European Union applies: the actual period of employment within the Commission under this type of contract, including any period under renewal, shall not exceed 6 years.

*Please note that in case a high number of applications is received only shortlisted candidates will be contacted.*