

**EUROPEAN SPACE AGENCY**

**Vacancy in the Directorate of Technical and Quality Management**

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. Applications from women are encouraged.

- POST** Space Environment and Effects Engineer, Space Environment and Effects Section, Electromagnetics and Space Environment Division, Electrical Engineering Department, [Directorate of Technical and Quality Management](#).
- This post is classified in the A2–A4 grade band on the Coordinated Organisations' salary scale.
- LOCATION** ESTEC, Noordwijk (Netherlands).
- DUTIES** The Space Environments and Effects Section supports the development of ESA missions and programmes by investigating the space environments within which they will operate, assessing likely effects and defining mitigation methods. Environments addressed include: high-energy radiation from radiation belts, solar-particle events and cosmic rays; plasmas encountered in planetary magnetospheres, the solar wind and artificially-generated charges and fields on spacecraft; micro-meteoroids, non-trackable debris and planetary atmospheres. The Section also initiates and manages related technology research and development (R&D) activities. See its web page (<http://space-env.esa.int>) for more details.
- Reporting to the Head of the Section and within these technical areas, the postholder's responsibilities will include:
- supporting ESA project development and operations through the provision of analyses of space environments and their effects in all project phases;
  - preparing and maintaining space environment specifications in early project phases;
  - reviewing the work of industry in respect of assessing the impact of space environments on the design of space systems;
  - supporting flight operation of environment monitors and performing analysis of their data;
  - supporting the investigation of in-flight behaviour of spacecraft and payloads;
  - preparing and executing R&D activities to improve understanding of the environment and its effects in the context of future mission preparation, including developing models, computational tools and instrumentation;
  - preparing and maintaining related engineering standards;
  - liaising with national agencies and institutes as required, in particular for harmonisation of R&D activities;
  - contributing to the support and development of a mixed Linux/Windows IT infrastructure for the Section and its specialist computational tools, including data systems, environment models, radiation effects analysis tools, integrated analysis environments, legacy systems and tools;
  - monitoring applicable scientific and technological trends and maintaining state-of-the art expertise;
  - contributing to dissemination of the results of activities performed and transfer of knowledge across the Agency.

## QUALIFICATIONS

Applicants for this post should have a Master's degree or equivalent qualification in physics, applied mathematics, engineering or a similar field, with a strong computing background, plus several years' experience of space environment engineering or physics.

Experience covering the plasma space environment, surface and internal electrostatic charging, planetary atmospheres, charged dust and contamination, and their interactions with spacecraft, along with the computational methods used to evaluate these interactions, is required.

In-depth familiarity with design, development and operation of associated instrumentation, e.g. plasma monitors, magnetometers, and data exploitation, will be an asset.

Candidates should have good interpersonal and communication skills with the ability to work autonomously, effectively and cooperatively in a diverse and international team environment, defining and implementing solutions in line with team and individual objectives as well as project deadlines.

Applicants should have good analytical, organisational and reporting skills, a proactive attitude to solving problems and an interest in innovative technologies.

For behavioural competencies expected from ESA staff in general, please refer to the [ESA Competency Framework](#).

The working languages of the Agency are English and French. A good knowledge of one of these is required. Knowledge of another Member State language would be an asset.

## CLOSING DATE

The closing date for applications is **6 December 2016**.

Applications from external candidates should preferably be made [online](#) from the ESA website ([www.esa.int/careers](http://www.esa.int/careers)). Those unable to apply on-line should submit their CVs to Human Resources, ESTEC, Keplerlaan 1, 2201 AZ Noordwijk ZH, The Netherlands.

ESA staff members wishing to apply should fill in the [Internal Application Form](#) and email it to [Apply2ESTEC](#).

The Agency may require applicants to undergo selection tests.

If you require support with your application due to a disability, please email [contact.human.resources@esa.int](mailto:contact.human.resources@esa.int).

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**Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and Canada.**

**Priority will first be given to internal candidates and secondly to external candidates from under-represented Member States.**

**In accordance with the European Space Agency's security procedures and as part of the selection process, successful candidates will be required to undergo basic screening before appointment.**