



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

Electromagnetic Compatibility Engineer in the Electromagnetic Compatibility (EMC) Section, Electromagnetics and Space Environment Division, Electrical Engineering Department, <u>Directorate of Technical and Quality Management</u>.

This post is classified in the A2-A4 grade band on the Coordinated Organisations' salary scale.

LOCATION

ESTEC, Noordwijk (Netherlands).

DUTIES

The EMC Section provides functional support to ESA projects and carries out research and development (R&D) activities in the field of EMC including magnetic cleanliness. The Section is also in charge of electrical harness design and engineering.

Reporting to the Head of Section and within the abovementioned technical fields, the main tasks and responsibilities of the postholder will include:

- Providing EMC engineering support to ESA projects throughout all phases of their development cycle, including:
 - definition and analysis of EMC requirements at system level as well as at harness and equipment level;
 - assessment of EMC test results, non-conformances and waiver requests;
 - definition and evaluation of magnetic cleanliness programmes and characterisation of magnetic properties of parts and equipment;
 - troubleshooting activities for spacecraft equipment and systems causing electromagnetic interference;
 - active participation in spacecraft or payload reviews;
- Supporting the exploitation of in-orbit data from magnetic instrument packages including:
 - assessment of anomaly root causes and impacts on science/post-processing;
 - definition of corrections and validation of algorithms for data processing;
- Formulating, developing and technically managing activities for EMC testing and verification techniques under ESA's Technology programmes;
- Applying EMC analytical software tools and evaluating the results obtained;
- Developing and applying specific measurement methods for the characterisation of the magnetic properties of equipment and entire spacecraft, using the Section's Mobile Coil Facility (MCF);
- Monitoring applicable scientific and technological trends and maintaining stateof-the-art expertise;
- Contributing to the dissemination of the results of the activities performed and the transfer of knowledge across the Agency.

QUALIFICATIONS

Applicants for this post should have a Master's degree or equivalent qualification in physics or electrical engineering, with a comprehensive background in electromagnetics and analysis.

Experience and knowledge in the field of EMC engineering are required, including test methods and experience of testing with the relevant instrumentation, as are a good mathematical background and experience in using software tools for analysis and data post-processing (e.g. Matlab).

A good background in physics, magnetics and electrical engineering, together with experience gained from working for projects in industry, and experience in harness design, would be assets.

Candidates should have good interpersonal and communication skills and be able to work effectively, autonomously and cooperatively in a diverse and international team environment and to define and implement solutions in line with team/individual objectives and 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 **8 December 2016**.

Applications from external candidates should preferably be made <u>online</u> from the ESA website (<u>www.esa.int/careers</u>). 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 <u>Internal Application Form</u> and email it to <u>Apply2ESTEC</u>.

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.

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 underrepresented 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.