Job Title: EMC & Harness Engineer

Reg ID 9925 - Posted 15/05/2020



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Technology, Engineering and Quality.

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

EMC & Harness Engineer

This position is classified A2-A4 on the Coordinated Organisations' salary scale.

This position forms part of ESA's Advance Recruitment Scheme which is established to provide appropriate staffing resources when requirements materialise.

Appointments are therefore made for an initial duration of two years upon which you may be appointed to a permanent post at the Agency.

Location

ESTEC, Noordwijk, The Netherlands

Description

EMC Engineer in the EMC & Harness Section, Power Systems, EMC & Space Environments Division, Electrical Department Department, Directorate of Technology, Engineering and Quality.

The Section provides functional support to ESA projects, manages and operates test facilities, and carries out technological research (R&D) in the fields of electromagnetic compatibility, (EMC), magnetic cleanliness and harness.

Duties

Reporting to the Head of Section and within the technical fields described above, your main tasks and responsibilities will include:

- providing expert technical support and consultancy to ESA projects, programmes and general studies in the field of EMC and magnetic cleanliness throughout all project phases, including supporting troubleshooting activities for spacecraft equipment and systems for EMC users;
- defining and analysing EMC requirements, assessing and reviewing electrical designs with respect to EMC design guidelines;
- participating in feasibility studies, project reviews and evaluation of procurement proposals;
- · identifying critical development problems and assisting in their resolution;
- contributing to the definition of technology development requirements and work plans for the Agency's Technology Programmes;
- defining, initiating and managing R&D activities covering long- and short-term needs;
- fostering new application areas for multidisciplinary activities, placing emphasis on innovative concepts, cuttingedge technologies and system architectures;
- laboratory activities: witnessing, performing and evaluating EMC tests, hands-on activities, calibration and maintenance, handling non-conformances and waiver requests;
- applying EMC and simulation tools, evaluating results obtained;
- monitoring applicable scientific and technological trends and maintaining state-of-the-art expertise;
- contributing to the dissemination of the results of activities performed and the transfer of knowledge across the Agency.

Your duties may include supporting other activities within your field of competence.

Technical competencies

General background and specific experience in the technical domains covered by the position

Hands-on hardware experience

Understanding of related technologies, R&D trends and the industrial landscape

Project support experience in a relevant domain

Experience with laboratory testing of relevant technical equipment

Knowledge of laboratory quality and maintenance systems, e.g. ISO 17025/9001

Experience in laboratory activities and management

Environmental testing for space hardware

Behavioural competencies

Communication
Teamwork
Customer Focus
Problem Solving
Results Orientation
Continuous Learning

Education

A Master's degree or equivalent qualification in electrical engineering with a comprehensive background in electromagnetics and analysis is required.

Additional requirements

A good knowledge and industrial experience in the field of EMC engineering is required, including EMC and DC magnetic test and measurement methods. Practical practical experience in lab testing using the relevant instrumentation, as well as knowledge of electrical safety in the lab and a background in calibration are also required.

Experience and knowledge in the field of harness engineering are an asset.

Other Information

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.

The Agency may require applicants to undergo selection tests.

The closing date for applications is 12 June 2020.

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, Canada and Slovenia.

According to the ESA Convention the recruitment of staff must take into account an adequate distribution of posts among nationals of the ESA Member States. When short-listing for an interview, priority will first be given to internal candidates and secondly to external candidates from under-represented Member States. (http://esamultimedia.esa.int/docs/careers/NationalityTargets.pdf)

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.

Recruitment will normally be at the first grade in the band (A2); however, if the candidate selected has little or no experience, the position may be filled at A1 level.