EUROPEAN SPACE AGENCY

Microwave Engineer

Job Req ID: 14606
Closing Date: 19 January 2022
Publication: Internal & External
Vacancy Type: Permanent
Date Posted: 15 December 2021

Vacancy in the Directorate of Technology, Engineering and Quality.

ESA is an equal opportunity employer, committed to achieving diversity within the workforc and creating an inclusive working environment. We therefore welcome applications from a qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.

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

Location
ESTEC, Noordwijk, Netherlands

Description
Microwave Engineer in the Radio Frequency (RF) Equipment and Technology Section, Radio Frequency Payloads and Technology Division, Electrical Department, Directorate of Technology, Engineering and Quality.

The RF Equipment and Technology Section provides engineering support to ESA projects and carries out technology research (R&D) in the fields of ground and space-borne RF equipment and its building blocks, RF active and RF passive technologies, time and frequency generation and distribution, RF testing, and instrumentation and related design and characterisation tools.

Duties
You will report to the Head of Section and your main tasks and responsibilities, within the above technical fields, will include:

- contributing to the design, development and performance evaluation of RF equipment, subsystems, components and technologies applicable to space and ground segments;
- providing expert technical support and consultancy to ESA projects, programmes and general studies in the field of RF equipment and technologies, throughout all project phase
- contributing to the definition of technology development roadmaps under the Agency's technology programmes;
- defining technical requirements and Statements of Work for the tasks to be performed industry, from early conceptual studies to full hardware development;
- initiating and managing R&D activities covering short- and long-term needs for our missions;
- fostering new application areas for multidisciplinary activities, with the emphasis on innovative concepts, cutting-edge technologies and system architectures;

technical domains;
- supervising students and trainees for analysis, simulation and development of advance concepts in the Section's technical domains;
- contributing to dissemination of the results of activities performed and the transfer of knowledge across the Agency.

You may also be required to support other activities within your area of competence.

Technical competencies
General background and specific experience in the technical domains covered by the position
Experience with the design, development and application of relevant tools and methods
Understanding of related technologies, R&D trends and familiarity with the industrial landscape
Project support experience in a relevant domain
Experience with laboratory and field testing of relevant technical equipment
Experience in preparation of procurement activities for technology development and innovation (statements of work, proposal evaluation)
Experience in the management and monitoring of industrial activities, including participatic in reviews

Behavioural competencies
Result Orientation
Operational Efficiency
Fostering Cooperation
Relationship Management
Continuous Improvement
Forward Thinking

Education
A Master's degree in telecommunication, electronic, microwave engineering or physics for this post is required.

Additional requirements

Minimum of ten years' experience in:
- The design and development of radio frequency generation equipment and technologie for space applications from low to high TRL levels, including knowledge-relevant design tools and verification methods.
- Project activities throughout all project phases.

The following will be considered an asset:
- A PhD in a relevant subject.
- Experience in the definition of R&D roadmaps for frequency generation equipment and technologies for space applications.
- Experience in emerging technologies for development of mm-wave frequency generati equipment e.g. novel high-Q resonator technologies, microwave photonics

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 o these is required. Knowledge of another Member State language would be an asset.

The Agency may require applicants to undergo selection tests.

At the Agency we value diversity and we welcome people with disabilities. Whenever possible, we seek to accommodate individuals with disabilities by providing the necessary support at the workplace. The Human Resources Department can also provide assistance during the recruitment process. If you would like to discuss this further please contact us 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, Germar Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and Canada, Latvia, Lithuania 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 or balanced Member States*. (https://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 befor 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.
*Member States, Associate Members or Cooperating States.