

Microwave Engineer

Job Req ID: 15204

Closing Date: 14 June 2022

Publication: Internal & External

Vacancy Type: Permanent

Date Posted: 17 May 2022

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. We therefore welcome applications from all 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 ground and space-borne RF equipment and its building blocks, RF active and RF passive technologies, time and frequency generation and distribution, RF testing, instrumentation and related design and characterisation tools.

Duties

You will report to the Head of Section and, within the above technical fields, your main tasks and responsibilities 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 area of RF equipment and technologies, throughout all project phases;
- 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 by 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;
- end-to-end laboratory activities as required to support industry, ESA projects and programmes;
- monitoring applicable scientific and technological trends, liaising with universities and research institutes in order to maintain state-of-the-art engineering expertise in the Section's technical domains;

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

Duties may also include providing support for other activities in 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 the industrial landscape

Project support experience in a relevant domain

Experience with laboratory or field testing of relevant technical equipment

Experience in the preparation of procurement activities for technology development and innovation (statements of work, proposal evaluation, etc)

Experience in the management and monitoring of industrial activities, including participation in reviews

Behavioural competencies

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

Education

A master's degree in telecommunication, electronic or microwave engineering or in physics is required.

Additional requirements

More than five years' experience in:

- The design and development of radio frequency equipment and technologies 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:

- Experience of defining R&D roadmaps in the field of RF equipment and technologies for space applications.
- Experience with emerging technologies e.g. GaN, novel high-Q resonator technologies, microwave photonics.
- A PhD in a relevant subject.

Other information

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

For further information please visit: [Professionals](#), [What we offer](#) and [FAQ](#)

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.

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, Germany, 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 before appointment conducted by an external background screening service.

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.