Job Title: Optoelectronics Engineer

Job Requisition ID 10792 - Posted 13/11/2020



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

Optoelectronics Engineer

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

Location

ESTEC, Noordwijk, The Netherlands

Description

Optoelectronics Engineer in the Optoelectronics Section, Mechatronics and Optics Division, Mechanical Department, Directorate of Technology, Engineering and Quality.

The Optoelectronics Section provides functional support to ESA projects and carries out technological research (R&D) in the field of optoelectronic device technologies and applications. In particular the Optoelectronics Section deals with the specification, development and characterisation of photonic components, subsystems and active optical instruments, such as detectors and lasers operating in the UV to FIR wavelength ranges, fibre-optic sensors, lidars, optical communication systems and quantum technologies.

Duties

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

- providing expert technical support and consultancy to ESA projects, programmes and general studies in the fields of photodetectors, focal plane instrumentation development, lasers and laser testing techniques throughout all project phases;
- 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 both long- and short-term needs;
- fostering new application areas for multidisciplinary activities, placing emphasis on innovative concepts, cutting-edge technologies and system architectures;
- laboratory activities as required;
- monitoring applicable scientific and technological trends and maintaining a state-of-the-art expertise;
- contributing to the dissemination of the results of the activities performed and the transfer of knowledge across the Agency.

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

Technical competencies

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

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

Communication
Teamwork
Customer Focus
Problem Solving
Results Orientation
Planning & Organisation

Education

A Master's degree or equivalent qualification in optoelectronics engineering is required. Preference will be given to those applicants with a PhD.

Additional requirements

At least 10 years' experience in the design, definition, development and testing of photonic devices and optical sensors, with detectors and detection chains including one or more of the following detector types: CCD, MCT, InGaAs and CMOS.

Strong theoretical and hands-on experience with laser system developments including development of laser optical metrology techniques or space optical communications is required.

Experience in providing support to Earth observation and science missions in the field of detectors and lasers at system level and also in following critical R&D activities tailored for to the specific needs of the mission will be considered a strong 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 27 November 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 and Canada, Latvia 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 underrepresented 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.