

Job Title: Photonic Components Engineer

Req ID 4721 - Posted 19/12/2017



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

Photonic Components Engineer

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

Location

ESTEC, Noordwijk, The Netherlands

Description

Photonic Components Engineer in the Components Section, Data Systems and Microelectronics Division, Electrical Department, Directorate of Technology, Engineering and Quality.

The Components Section provides functional support to ESA projects and carries out technological research (R&D) in the field of Electrical, Electronic and Electromechanical (EEE) components with a strong focus on technologies and processes, development and reliability as well as on ground qualification activities.

The selected candidate shall provide support in the area of photonic components such as optical switches, isolators, attenuators, opto-couplers, photodiodes, phototransistors as well as light sources (VCSELs, semiconductor lasers, fibre optic lasers, semiconductor pump lasers, LEDs), light detection (PIN and APDs), planar waveguide photonic devices (optical modulators, fibre optic amplifiers, erbium doped waveguide amplifiers, planar waveguide splitters), fibre optic links (fibre optics jackets, single and multiple fibre optic connectors, fibre optic isolators and splitters), fibre optic sensors (FBGs and FOG) and detectors (CCD, APS, SWIR and VNIR).

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 field of photonic components 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.

Duties may also include supporting other activities within the post holder's 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 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

Innovation & Creativity

Problem Solving

Results Orientation

Education

A Master's degree or equivalent qualification in opto-electronics engineering or a related subject is required.

Additional requirements

Experience in R&D, laboratory investigations, manufacturing processes, design and development or testing of components is also required. Experience with Space Engineering standards and specifications (ECSS and ESCC systems) and their preparation and implementation will be 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 30 January 2018.

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 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. Priority will first be given to internal candidates and secondly to external candidates from under-represented Member States when short-listing for interview.

(<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.