

Job Title: Instrumentation Engineer

Req ID 7506 - Posted 13/07/2018



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

Instrumentation Engineer

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

Location

ESTEC, Noordwijk, The Netherlands

Description

Instrumentation Engineer in the Life Support and Physical Sciences Instrumentation Section in the Mechatronics and Optics Division, Mechanical Department, Directorate of Technology, Engineering and Quality.

The Life Support and Physical Sciences Instrumentation Section deals with the development of life support technologies, telemedicine and health-related applications.

This includes life support, life and physical science experiments and medical instrumentation. Furthermore, the Section pursues technology developments related to solar system exploration, in particular instrumentation to search for life and to support the long-term presence of man in space. It provides functional support to ESA projects, primarily in the areas of human spaceflight, robotic exploration and telecommunication and integrated applications.

Duties

Reporting to the Head of Section and within the technical fields described above, the main tasks and responsibilities of the post holder will be to support the development of instrumentation technology related to health and medical sciences and to provide functional support to ESA programmes, primarily Telecommunication and Integrated Applications, Human Spaceflight and Robotic Exploration. Within this overall frame of reference, the holder of the post will:

- provide expert technical support and consultancy to ESA projects, programmes and general studies in the fields of human spaceflight and telecommunications and integrated applications throughout all project phases;
- act in a pivotal role between technology development and ESA programmes, primarily Telecommunications and Integrated Applications and Human Spaceflight and Robotic Exploration, in order to link activities and use synergies between stakeholder interests;
- participate in feasibility studies, project reviews and evaluation of procurement proposals;
- identify critical development problems and assist in their resolution;
- contribute to the definition of technology development requirements and work plans for the Agency's technology programmes;
- define, initiate and manage R&D activities covering both long- and short-term needs;
- foster new application areas for multidisciplinary activities, placing emphasis on innovative concepts, cutting-edge technologies and system architectures;

- carry out laboratory activities as required;
- monitor applicable scientific and technological trends and maintaining a state-of-the-art expertise;
- contribute 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

Project support experience in a relevant domain

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

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

Innovation & Creativity

Problem Solving

Results Orientation

Planning & Organisation

Education

A Master's degree or equivalent qualification in engineering or physics with specific relevance for medical instrumentation is required.

Additional requirements

- In-depth knowledge of medical instrumentation development and operation and a solid background in human physiology and aerospace medicine
- In-depth knowledge of space-based (i.e. satellite communications, satellite navigation and/or Earth observation) applications and services in the medical field as well as experience in assessing the associated business opportunities (i.e. impact assessment, financial indicators, business development options, etc.).
- Good understanding and experience of related technology areas, such as optics, electronics and software, to support the system engineering capability required for the post.

Experience in supporting projects in the domains of telecommunications, human spaceflight and/or robotic exploration with a focus on health- and aviation-related instrumentation and applications would be a valuable asset, as would knowledge of satcom applications.

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 24 August 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. 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.