

Optical Engineer

Job Req ID: 12749

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Vacancy Type: Permanent

Date Posted: 05 October 2021

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

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

The Optics Section provides functional support to ESA projects and carries out technology research (R&D) in optics for space applications. The Optics Section's activities cover the development of novel optical systems, such as spectro-radiometric imaging instruments, operating in the UV to infrared spectral range, and interferometers, including the relevant optical ground equipment.

The Optics Section is responsible for developing a broad range of technologies addressing optical components and processes, such as polarisers, gratings, coatings, polishing methodologies, and the metrology of optical components. Significant work is also done on the development of technologies for the next generation of X-ray space telescopes.

Duties

You will report to the Head of Section and, in the above technical areas, will have the following main tasks and responsibilities:

- Providing expert technical support and consultancy to ESA projects, programmes and general studies for the development of optical space instrumentation throughout all project phases;

- Participating in feasibility studies, project reviews and the 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, with the emphasis on innovative concepts, cutting-edge technologies and system architectures;
- Contributing to laboratory activities;
- Monitoring applicable scientific and technological trends and maintaining state-of-the-art expertise;
- Contributing to dissemination of the results of technology development activities and the transfer of knowledge within the Agency.

Your duties may also include providing support for other activities within your area of competence.

Technical competencies

- General background and specific experience in the technical domains covered by the position
- Hands-on experience in assembly, integration and testing/verification of optical instrumentation
- Experience with optical design and associated software tools
- Understanding of relevant technologies required for optical instrumentation, knowledge of R&D trends and the industrial landscape
- Experience with laboratory or field testing of optical systems
- Experience in managing and monitoring industrial activities, participation in reviews

Behavioural competencies

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

Education

A Master's degree in optical engineering or applied physics is required for this post.

Additional requirements

- You should have at least 10 years' industrial experience in the design and development of optical space instruments.
- Experience in optical component manufacturing technologies, associated challenges and knowledge of state-of-the-art performance.
- Ability to perform conceptual and detailed optical design and performance analysis of optical instrumentation using the appropriate software tools.
- Knowledge of testing and verification methods for optical components.
- Basic knowledge of other engineering areas (e.g. mechanical, thermal, materials) is considered 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.

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 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.

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.