



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

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

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

LOCATION

ESTEC, Noordwijk (Netherlands).

DUTIES

The postholder reports to the Head of the Optics Section, which provides functional support to ESA projects and carries out technological research activities in the areas of optical component technology, such as micro-optics, passive integrated optics, x-ray optics; optical instrumentation, such as spectro-radiometric imaging instruments in the visible and infrared interferometers; testing, calibration and performance verification of optical systems.

In these technical areas, the main tasks and responsibilities will include:

- providing expert technical support and consultancy to ESA projects for the development of optical space instruments throughout all project phases;
- participating in project reviews and evaluations of industrial procurement proposals;
- performing system design of space optical systems, such as spectrometers, telescopes and radiometers, and analysing optical system performance, such as image quality and spectro-radiometric budgets;
- contributing to the definition of technology development requirements and work plans for ESA's Technology programmes;
- managing industrial R&D contracts for the development of innovative technologies for optical instruments, spectro-calibration of high-performance optical systems and for the testing of high-performance optical components, such as gratings, diffusers and anti-reflection coatings;
- identifying development activities for innovative optical instruments for space, performing feasibility studies, identifying critical areas and defining de-risking activities:
- monitoring applicable scientific and technological trends, maintaining state-ofthe-art expertise;
- contributing to the dissemination of the results of activities performed and the transfer of knowledge across the Agency.

QUALIFICATIONS

Applicants for this post should have a Master's degree or equivalent qualification in optical engineering or applied physics with major emphasis on optics. Knowledge of software tools for optical design and performance analysis would be an asset. A proven ability to develop ad-hoc analysis tools is desirable.

Candidates should have at least five years' industrial experience in system design, performance analysis. Hands-on experience in testing and calibration of optical systems, such as spectrometers, astronomical telescopes and interferometers, as well as experience of space-based optical systems would be assets.

Applicants should have good interpersonal and communication skills. They should be able to work effectively, autonomously and cooperatively in a diverse and international team environment, defining and implementing solutions in line with team and individual objectives, as well as project deadlines.

Candidates should also have good analytical, organisational and reporting skills, a proactive attitude to problem-solving and an interest in innovative technologies.

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.

CLOSING DATE

The closing date for applications is **18 April 2017**.

Applications from external candidates should preferably be made <u>online</u> from the ESA website (<u>www.esa.int/careers</u>). Those unable to apply online should submit their CV to Human Resources, ESTEC, Keplerlaan 1, 2201 AZ Noordwijk ZH, The Netherlands.

ESA staff members wishing to apply should fill in the <u>Internal Application Form</u> and email it to <u>Apply2ESTEC</u>.

The Agency may require applicants to undergo selection tests.

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, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and Canada.

Priority will first be given to internal candidates and secondly to external candidates from underrepresented Member States.

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.