

# Job Title: Metrology Engineer

Req ID 8810 - Posted 11/10/2019



## 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 Metrology Engineer

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

**Location**  
ESTEC, Noordwijk, The Netherlands

### Description

Metrology Engineer in the Engineering Services Section, Test Centre Division, Mechanical Department, Directorate of Technology, Engineering and Quality.

The Engineering Services Section provides support in the fields of mechanical engineering and manufacturing, electrical engineering, metrology and instrument calibration, mainly to the Test Centre for what concerns update and development of test facilities, to the customers of the Test Centre, to the ESTEC laboratories and to ESA projects. In addition, technological research (R&D) activities in the above engineering fields are also carried out in the Engineering Services Section.

### 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:

- executing metrology measurement and provide consultancy to the Test Centre, laboratories and ESA programmes;
- managing the day-to-day activities of the Metrology Laboratory, including but not limited to the planning, organization and follow up of the required maintenance activities;
- participating in feasibility studies, project reviews and evaluation of procurement proposals;
- contributing to the generation of innovative ideas and technology developments in the field of test instrumentation for metrological applications;
- monitoring applicable scientific and technological trends and maintaining a state-of-the-art expertise in the field of metrology, specifically contactless measurement (e.g. dimensional metrology and thermography);
- defining the requirements, conceptual design, development and qualification of state-of-the-art test instrumentation for space environmental measurement with focus on contactless measurements;
- supporting the maintenance of the certification to ISO9001 of the Engineering Services Section and in particular of the Metrology Laboratory;
- supporting investment and maintenance activities of the Test Centre;
- 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

Experience with laboratory or field testing of relevant technical equipment  
Experience with the design, development and application of relevant tools and methods  
Knowledge of laboratory quality and maintenance systems, e.g. ISO 17025/9001  
Experience in the preparation of procurement activities for technology development and innovation (statements of work, proposal evaluation, etc)

## Behavioural competencies

Communication  
Teamwork  
Customer Focus  
Innovation & Creativity  
Problem Solving  
Planning & Organisation

## Education

A Master's degree or equivalent qualification in geomatics or precision engineering is required.

## Additional requirements

Given the responsibility of the daily running of the Metrology Laboratory, candidates are required to have proven working experience and good knowledge of the functioning principles for:

- the standard metrology tools: laser trackers, theodolites, CMM machines
- videogrammetry
- thermography
- alignment methods
- image processing techniques.

Familiarity with the use of MATLAB and LABVIEW is also required.

Experience in the development and operation of complex instrumentation is required, together with a solid knowledge of the guidelines and best practices to follow for the creation of uncertainty budgets for the instrumentation which has been developed.

Previous experience of cooperating with academic institutions and research centres on research activities is an asset, as is knowledge of space project requirements, i.e. space environment, cleanliness and quality aspects.

## 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 25 October 2019.

If you require support with your application due to a disability, please email [contact.human.resources@esa.int](mailto: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.