

# EUROPEAN SPACE AGENCY

## Electromechanical Instrumentation Engineer

**Job Req ID:** 15064

**Closing Date:** 11 April 2022

**Publication:** Internal & External

**Vacancy Type:** Permanent

**Date Posted:** 14 March 2022

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

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

The Engineering Services Section provides support to the Test Facilities operation and development, to the customers of the Test Facilities, to the ESTEC laboratories and to ESA projects in the field(s) of mechanical engineering, electrical engineering and metrology.

### Duties

Reporting to the Head of Section and within the technical fields described above, your main tasks and responsibilities will include:

- execution of design, manufacturing and assembly tasks of electro-mechanical hardware related to test facilities, test equipment and test instrumentation;
- performing mechanical simulation in support of the Test Facility and Test Method Section;
- building and maintaining mathematical models of the facilities to perform virtual testing for the preparation of test campaigns;
- supporting Test Centre Customers in the analysis of complex data coming out of the tests or simulations;
- supporting the other Sections in the Test Centre Division;

- supporting the implementation of the annual investment plan of the Test Centre Division;
- participating in feasibility studies, project reviews and the evaluation of procurement proposals;
- providing expert technical support and consultancy to ESA projects, programmes and general studies in the field of mechanical testing throughout all project phases;
- monitoring applicable scientific and technological trends and maintaining state-of-the-art expertise;
- contributing to the dissemination of the results of the activities performed and the transfer of knowledge across the Agency.

Your duties may also include supporting other activities within your field of competence.

### **Technical competencies**

General background and experience in the technical domains covered by the position

Hands-on hardware experience

Experience with the design, development and application of relevant tools and methods

Experience with laboratory and field testing of relevant technical equipment

Environmental testing for space hardware

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**

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

### **Education**

A Master's degree in mechanical, aeronautic or aerospace engineering for this post is required.

### **Additional requirements**

Applicants must be familiar with computer-aided design (preferably CATIA V5 or 3D Experience) and with simulation tools (NASTRAN for Finite Element Analysis, and Matlab/Simulink for simulation of complex systems).

Knowledge of optical simulation tools (e.g. LightTools) or of tools for infrared image processing is considered an asset. Several years of experience in a design office and a test house is also considered an asset.

### **Other information**

For behavioural competencies expected from ESA staff in general, please refer to the [ESA Competency Framework](#).

For further information please visit: [Professionals](#), [What we offer](#) and [FAQ](#)

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](mailto:contact.human.resources@esa.int).

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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 or balanced 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 conducted by an external background screening service.

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.

\*Member States, Associate Members or Cooperating States.