EUROPEAN SPACE AGENCY

Thermal Analysis and Verification Engineer

Job Req ID: 15020
Closing Date: 06 April 2022
Publication: Internal & External
Vacancy Type: Permanent
Date Posted: 09 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
Thermal Analysis and Verification Engineer in the Thermal Analysis and Verification Section, Thermal Division, Mechanical Department, Directorate of Technology, Engineering and Quality.

The Thermal Analysis and Verification Section provides functional support to ESA projects and carries out technology research (R&D) in thermal analysis methods and tools, as well as interdisciplinary analysis in the mechanical domain and related product data exchange. It is also responsible for the Mechanical Systems Laboratory, which provides support to ESA projects and external customers in the area of thermal and mechanical verification by testing.

Duties
You will report to the Head of Section and, within the above technical fields, your main tasks and responsibilities will include:

- providing expert technical support and consultancy to ESA projects, programmes and general studies in the field of thermal analysis and verification throughout all project phases, with the emphasis on verification of small-scale hardware by testing in the Mechanical Systems Laboratory;
- performing advanced thermal analysis to support the thermal subsystem definition and thermal modelling required for thermal tests and associated facilities;
- defining, planning and performing thermal and mechanical tests and experiments to support ESA projects and external third-party customers in compliance with agreed specifications;

- 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;
- monitoring applicable scientific and technological trends and maintaining state-of-the-art expertise;
- contributing to dissemination of the results of activities performed and the transfer of knowledge across the Agency.

Duties may also include supporting other activities within your area of expertise.

Technical competencies

General background and specific experience in the technical domains covered by the position
Understanding of and practical experience with related technologies, R&D trends and the industrial landscape
Project support experience in a relevant domain
Environmental testing for space hardware
Experience with laboratory or field testing of relevant technical equipment
Experience in the preparation of procurement activities for technology development and laboratory technical infrastructure

Behavioural competencies

Communication
Teamwork
Customer focus
Innovation & creativity
Problem solving
Planning & organization

Education

A master's degree or equivalent qualification in mechanical engineering or physics is required.

Additional requirements

Knowledge and practical experience of experimental test methods for space applications in the thermal/mechanical field and related technologies.
Knowledge of thermal analysis tools such as ESATAN-TMS.

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.

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.