Job Title: Mechanisms Engineer

Reg ID 10181 - Posted 01/07/2020



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

Mechanisms Engineer

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

Location

ESTEC, Noordwijk, The Netherlands

Description

Mechanisms Engineer in the Mechanisms Section, Structure, Mechanisms and Materials Division, Mechanical Department, Directorate of Technology, Engineering and Quality.

The Section provides functional support to ESA projects and carries out technological research (R&D) in the field(s) of: space mechanisms (such as for deployment and pointing or hold-down and release, solar array drives, and reaction wheels), tribology, pyrotechnics, and space mechanical systems for satellites and launchers.

Duties

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

- providing expert technical support and consultancy to ESA projects, programmes and general studies in the field of mechanisms throughout all project phases;
- participating in feasibility studies, project reviews and evaluation of procurement proposals;
- identifying critical development problems and assisting in their resolution, as well as assessing mechanisms development and verification test programmes;
- 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, placing emphasis on innovative concepts, cuttingedge technologies and system architectures;
- defining relevant infrastructure requirements in terms of testing, standards and numerical simulation;
- hands-on laboratory activities as required;
- 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.

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

Technical competencies

General background and specific experience in the technical domains covered by the position Experience in the development and verification of space hardware

Experience in the preparation of procurement activities for technology development and innovation (statements of work, proposal evaluation, etc)

Project support experience in a relevant domain

Hands-on laboratory experience

Experience in the management and monitoring of industrial activities, including participation in reviews

Experience with Space Engineering Standards and their preparation and implementation

Behavioural competencies

Communication
Teamwork
Innovation & Creativity
Results Orientation
Planning & Organisation
Continuous Learning

Education

A Master's degree in mechanical or aeronautical engineering or a similar field is required.

Additional requirements

Experience with space mechanisms/mechanisms building blocks and related subsystems is required, as is knowledge of space tribology.

Some years of experience in the design, development and testing of mechanisms for space or aeronautical applications and knowledge in simulation software (e.g. MATLAB, Simulink, COMSOL Multiphysics, FLUX 2D/3D, Ansys Maxwell, MSC Adams, LabVIEW) will be 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.

The closing date for applications is 29 July 2020.

If you require support with your application due to a disability, please 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 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.