EUROPEAN SPACE AGENCY

Mechanisms Engineer

Job Req ID: 12842
Closing Date: 06 October 2021
Publication: Internal & External
Vacancy Type: Permanent
Date Posted: 08 September 2021

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

The Mechanisms 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
Reporting 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 Space Mechanisms and Space Mechanical Systems 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, cutting-edge 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
Result Orientation
Operational Efficiency
Fostering Cooperation
Relationship Management
Continuous Improvement
Forward Thinking

Education
A Master's degree either in mechanical or aeronautical engineering or a similar field for this post is required.

Additional requirements
Proven experience in the development of high reliability mechanisms in the aeronautics or space field.
Experience with space mechanism/mechanism 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 of simulation software (e.g. MATLAB, Simulink, COMSOL Multiphysics, FLUX2D/3D, ANSYS Maxwell, MSC ADAMS, LabVIEW) will be considered an asset.
Applicants are expected to demonstrate good cognitive capacity, technical judgement and solid communication skills.

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.

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 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.

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.

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