

## EUROPEAN SPACE AGENCY

### Vacancy in the Directorate of Technical and Quality Management

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 in the Mechanisms Section, Structure and Mechanisms Division, Mechanical Engineering Department, [Directorate of Technical and Quality Management](#).

This post is classified in the A2–A4 grade band on the Coordinated Organisations' salary scale.

**LOCATION** ESTEC, Noordwijk (Netherlands).

**DUTIES** The postholder will report to the Head of the Mechanisms Section. The Section's main activities cover the following technical areas: 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 will include:

- establishing relevant technology development requirements under the Agency's basic and supporting technology programmes;
- defining, initiating and monitoring appropriate industrial research and development activities;
- providing support to projects, programmes and general studies;
- participating in project reviews and procurement package evaluations;
- identifying critical development problems and assisting in their resolution, as well as assessing mechanisms development and verification test programmes;
- monitoring applicable technological trends and maintaining state-of-the-art expertise in the relevant domains;
- pursuing product developments for science and commercial space market applications in the field of space mechanisms;
- fostering new application areas for multidisciplinary mechanical systems, placing emphasis on innovative concepts, cutting-edge technologies and system architectures that can lead to potential breakthroughs in mission capabilities;
- defining relevant infrastructure requirements in terms of testing, standards and numerical simulation;
- contributing to 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 postholder's field of competence.

## QUALIFICATIONS

Applicants for this post should have a Master's degree or equivalent qualification in mechanical or aeronautical engineering or a similar field, with several years' experience in the development of mechanisms for space or aeronautical applications.

Knowledge of space tribology, ball bearings, electrical motors and sensors is required. In addition, experience in one or more of the following fields of expertise will be considered a strong asset:

- Design, analysis and test of control laws for open and closed loop mechanisms driven by electric actuators, including prediction of related microvibrations;
- Verification, through simulation and test, of the pointing performance of mechanisms driven by electric actuators when subjected to spacecraft microvibrations;
- Multibody/multidisciplinary simulations of complex mechanism systems, their kinematics and non-linear coupling with flexible structures;
- Electromagnetic device design, modelling and optimisation, with emphasis on electric motors and actuators for space applications.

Candidates should have good interpersonal and communication skills. They should have the ability to work autonomously, effectively and cooperatively in a diverse and international team environment and to define and implement solutions in line with team and individual objectives as well as project deadlines.

They should also have good analytical, organisational and reporting skills, a proactive attitude to solving problems and an interest in innovative technologies.

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.

## CLOSING DATE

The closing date for applications is **1 December 2016**.

Applications from external candidates should preferably be made [online](#) from the ESA website ([www.esa.int/careers](http://www.esa.int/careers)). Those unable to apply on-line should submit their CVs to Human Resources, ESTEC, Keplerlaan 1, 2201 AZ Noordwijk ZH, Netherlands.

ESA staff members wishing to apply should fill in the [Internal Application Form](#) and email it to [Apply2ESTEC](mailto:Apply2ESTEC).

The Agency may require applicants to undergo selection tests.

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

**Priority will first be given to internal candidates and secondly to external candidates from under-represented Member States.**

**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.**