

## 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.

TITLE Structural Engineer in the Structures Section, Structures, Mechanisms and Materials Division, Mechanical Department, Directorate of Technology, Engineering and Quality. GRADE This post is classified in the A2-A4 grade band on the Coordinated Organisations' salary scale. This position forms part of ESA's Advance Recruitment Scheme which is established to provide appropriate staffing resources when requirements materialise. Appointments are therefore made for an initial duration of two years, after which the selected candidate may be appointed to a permanent post at the Agency. **LOCATION** ESTEC, Noordwijk (Netherlands). DUTIES Deployed in the Structures Section of the Division, the postholder will provide functional support to spacecraft and payload projects in the areas of mechanical systems, structural design/verification, manufacturing, structural dynamics and application of lightweight structures. Duties also include participating in conceptual and feasibility studies and providing support to the Agency's technology R&D activities.

The main tasks include:

- participating in feasibility studies for preparing specifications and analysing industrial proposals;
- providing functional support to approved projects and feasibility studies in all aspects of mechanical systems and configuration, structural design, analysis and mechanical testing;
- identifying critical development problems and assisting with their resolution, which includes evaluating complete mechanical systems;
- performing structural analysis as required to support the development of structure subsystems;
- participating in major reviews of spacecraft, launchers and payloads;
- establishing and evaluating specifications for the development and qualification of spacecraft system/subsystem structures with a view to defining requirements for environment-induced loads, model development philosophy and relevant verification methods;
- participating in the definition and execution of Agency standards and technology programmes with special emphasis on mechanical system and configuration aspects, lightweight structures, structural dynamics and advanced structural materials technologies;
- supporting activities regarding structural integrity, evaluating loads during the structure's life and their impact on overall verification, including establishing

specifications, design, analysis, inspection and testing;

- supporting concurrent design activities regarding mechanical systems aspects;
- contributing to the dissemination of the results of activities performed and knowledge transfer across the Agency.

## QUALIFICATIONS Applicants for this position should have a Master's degree in mechanical or aeronautical engineering. A good knowledge of mechanical systems and advanced methods of structural development and verification is required. Some years' experience of spacecraft/payload structures and structural analysis, as well as concurrent engineering and interfaces with other space disciplines, would be an asset.

Candidates should have good interpersonal and communication skills. They should be able to work autonomously, effectively and cooperatively in a diverse and international team environment, defining and implementing solutions in line with team and individual objectives and project deadlines. They should demonstrate a high degree of professional curiosity and a strong interest in learning.

Applicants should have good analytical, organisational and reporting skills, a proactive attitude to problem-solving 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 **23 May 2017**.

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

ESA staff members wishing to apply should fill in the <u>Internal Application Form</u> and email it to <u>Apply2ESTEC</u>.

The Agency may require applicants to undergo selection tests. If you require support with your application due to a disability, please email <u>contact.human.resources@esa.int.</u>

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.

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.

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, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and Canada.

Priority will first be given to internal candidates and secondly to external candidates from underrepresented Member States.