

EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Technical and Quality Management

The European Space Agency is an equal opportunity employer and encourages applications from women

POST Structural Engineer in the Structures Section, Structures and Mechanisms Division, Mechanical Engineering Department, <u>Directorate of Technical and Quality</u> <u>Management</u>.

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

LOCATION ESTEC, Noordwijk (Netherlands).

DUTIES Deployed in the Structures Section of the Structures and Mechanisms Division, the postholder will provide functional support to spacecraft and payload projects in the areas of mechanical systems, structural design and verification, manufacturing, structural dynamics and application of lightweight structures. The incumbent will also participate in conceptual and feasibility studies and provide support to the Agency's technology R&D activities.

The main tasks will include the following:

- participating in feasibility studies for the preparation of specifications and analysis of industrial proposals;
- providing functional support to approved projects and feasibility studies in relation to all aspects of mechanical systems and configuration, structural design, analysis and mechanical testing;
- identifying critical development problems and assisting in 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 and subsystem structures with respect 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 on structural integrity, evaluation of loads during the life of the structures and their impact in overall verification, including establishment of 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 the transfer of knowledge across the Agency.

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

Candidates should preferably also have experience in the execution of spacecraft and payload reviews, ideally acquired in the area of (stable) spacecraft structures.

Applicants 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 and project deadlines.

Candidates should also 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 **8 December 2015**.

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 online 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.

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, 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.