

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 Materials and Processes Engineer in the Materials Technology Section, Components Technology and Space Materials Division, Product Assurance and Safety Department, [Directorate of Technical and Quality Management](#).

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

LOCATION ESTEC, Noordwijk (Netherlands).

DUTIES The postholder will report to the Head of the Materials Technology Section and will undertake technical support activities for ESA projects and technology programmes in the fields of metallic materials and electronic assemblies.

Specific duties of the post will include:

- providing materials and manufacturing processes expertise to all ESA programmes, covering advanced and conventional metallic alloys (including, for example, steels, aluminium and titanium alloys) and non-metallic materials (including carbon-fibre-reinforced polymer (CFRP) and ceramics) as well as electronic materials, interconnection methods, electronic packaging and printed circuit boards;
- assessing the effect of the space environment on spacecraft hardware (including sublimation, cold welding, atomic oxygen, thermal fatigue, vibration);
- performing tasks related to the metallurgical assessment of materials, including metallurgical laboratory evaluations and the drafting of relevant reports;
- performing failure analysis using a variety of laboratory tools;
- reviewing Materials, Mechanical Parts and Processes Lists of ESA programmes in the framework of the Materials and Processes Review Boards, and participating in programmatic meetings, reviews and audits;
- participating in the definition, drafting, implementation and updating of the ECSS standards relevant to the Section's domain of competence;
- coordinating and defining future technology requirements with ESA and industrial stakeholders;

- defining and managing technical activities for tasks to be performed by industry in the framework of ESA technology programmes;
- contributing to the diffusion of the results of the activities performed and the transfer of knowledge across the Agency.

QUALIFICATIONS

Applicants for this post should have a Master's degree or equivalent qualification in materials engineering and science, materials physics/metallurgy, or a related field, as well as several years of industrial experience, preferably related to aerospace hardware.

Candidates should also have hands-on experience in metallurgy, failure analysis and the effects of the space environment on metallic materials or electronic assemblies. In addition, applicants should demonstrate a sound knowledge of materials, processes, modelling and verification- and testing-related aspects for high-end technology domains (e.g. aeronautics, nuclear, automotive, medical).

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.

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

The working languages of the Agency are English and French. A good knowledge of one of these languages is required. Knowledge of another Member State language would be an asset.

CLOSING DATE

The closing date for applications is **16 January 2015**.

Applications from external candidates for this post should preferably be made [online](#) from the ESA website (www.esa.int/careers). Those unable to apply online should submit their CV to Human Resources, ESTEC, Keplerlaan 1, 2201 AZ Noordwijk ZH, The Netherlands.

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

The Agency may require applicants to undergo selection tests.

Under ESA Regulations, the age limit for recruitment is 55. Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, 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 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.