



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

Control System Engineer in the Control Systems and Sensors Section, Control Systems Division, Electrical Engineering Department, <u>Directorate of Technical and Quality Management</u>.

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 Control Systems and Sensors Section. The Section's main responsibilities are technical support to projects and technology research and development for satellite attitude control systems.

The duties of this post are providing AOCS (Attitude and Orbit Control System) engineering expertise to satellite projects, and managing AOCS systems and hardware development contracts.

The main tasks of this post are:

- providing AOCS engineering expertise to satellite projects involving requirement analysis and trade-offs, performance and budget analyses, writing and assessment of AOCS specifications (subsystem and units) and interfaces, participating in the evaluation of industrial proposals, being an engineering focal point for the AOCS subsystem and unit procurement;
- reviewing, evaluating and checking industrial contractors' AOCS designs, detailed
 analysis, simulations and tests; identifying design deficiencies and problem areas
 and assisting in their resolution. These activities will be carried out during all
 phases of satellite procurement, from preliminary definition up to launch, with
 particular emphasis on project reviews;
- conceiving, initiating and managing research and development contracts for AOCS subsystem and hardware (sensors/actuators) technology (including control techniques, electronics and interfaces, on-board control software, etc.). This task involves preparing specifications and work statements, as well as monitoring and controlling technical and schedule performance;
- specifying, implementing and verifying control laws using computer-aided design tools. This activity also involves verifying the real-time embedded software used to implement the control laws, satellite dynamics and AOCS unit modeling;
- participating in control hardware laboratory work, which also involves preparing and using in-house test facilities for the evaluation and pre-validation of new AOCS and sensor/actuator designs;

• contributing to the dissemination 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 control and aerospace engineering, with at least five years' experience in the development of satellite AOCS relevant to most of the tasks and duties described above.

Candidates should have good general experience of satellite AOCS development throughout the different project phases, as well as a good knowledge of different system architectures and control concepts for different satellite missions, including fault tolerance (FDIR) aspects. Good experience of hardware development (sensor and actuator technologies), together with knowledge in control design, analyses and simulation, is required. Experience of implementation and verification activities is an asset. Ideally, applicants should also have relevant management and organisational skills for running AOCS technology contracts.

Candidates should have good interpersonal and communication skills, with the ability to work 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, they 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 **3 July 2015**.

Applications from external candidates for this post 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.

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 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.