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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

Microelectronics Engineer in the Microelectronics Section, Data 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 Microelectronics Section and will contribute to microelectronics activities related to Application-Specific Integrated Circuit (ASIC) and Field Programmable Gate Array (FPGA) development within the Data Systems Division, while supporting related activities for other Divisions and projects.

The main responsibilities and duties will include:

- providing technical expertise in the field of semi- and fully customdesigned Very-Large-Scale Integration (VLSI) integrated circuits for ESA's spacecraft projects and R&D technology activities;
- planning, initiating and supervising contracts with industry for microelectronics development, in coordination with ESA contracts officers;
- reviewing and supporting end-to-end development and in-system integration processes for ASICs or FPGAs, assisting in any IC development phases as required;
- supporting the development of ASICs and/or FPGAs used inside satellite
 instruments and the platform avionics systems for various ESA missions
 belonging to any of its Programme Directorates (mainly Earth
 Observation, Telecommunications, Navigation, Science);
- participating in conceiving and scheduling future plans for microelectronics at ESA, taking into consideration past and present development as well as state-of-the-art ASIC and FPGA manufacturing processes, design libraries, design tools, packaging and test tools, as applicable to space applications;
- 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 or equivalent in electronic engineering or physics, with a specialisation in microelectronics. Candidates should have several years' experience in end-to-end design of complex digital, mixed-signal and/or analogue ASICs.

Important additional assets are knowledge and experience in the following areas:

- FPGA design, technology and tools,
- ASIC and/or FPGA functional, electrical and environmental testing,
- managing technical contracts with industry and international consortia,
- the space environment, its effects on microelectronics devices and related technology,
- quality standards applied to VLSI ICs for space.

Applicants should have good interpersonal and communication skills. They should be able to work effectively, autonomously 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.

For behavioural competencies expected from ESA staff, please refer to the ESA Competency Framework.

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 5 November 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 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</u> Form and email it to <u>Apply2ESTEC</u>.

The Agency may require applicants to undergo selection tests.

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, 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 underrepresented 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.