

Job Title: Principal Instrument Engineer

Req ID 7321 - Posted 26/07/2018



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Earth Observation Programmes.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. Applications from women are encouraged.

Post

Principal Instrument Engineer

This post is classified A2-A4 on the Coordinated Organisations salary scale.

Location

ESTEC, Noordwijk, The Netherlands

Description

Principal Instrument Engineer, Meteorological Operational Second Generation (MetOp-SG) Payload Section, MetOp-SG Project Division, Earth Observation Projects Department, Directorate of Earth Observation Programmes.

MetOp-SG is an operational meteorological programme established in cooperation with Eumetsat, ESA being responsible for the definition and development of the space segment and the procurement of the recurrent satellites on Eumetsat's behalf.

Duties

Reporting to the MetOp-SG Payload Manager, the postholder will be responsible for all aspects of MicroWave Imager (MWI) radiometer instrument design, development, testing and performance activities under the MetOp-SG Programme.

The main tasks and responsibilities for the radiometer instrument include:

- Managing and monitoring all aspects of instrument specification, design, implementation and testing, ensuring full compliance is maintained (and demonstrated) with system-level technical and programmatic requirements.
- Monitoring the industrial progress and design evolution at instrument and equipment levels, ensuring they remain consistent with MetOp-SG technical and programmatic requirements.
- Providing early warning of potential problem areas, ensuring appropriate mitigation actions are identified and implemented.
- Ensuring that operability of the instrument is fully compatible with overall MetOp-SG satellite operations, observability and availability requirements.
- Coordinating specialist support as necessary.
- Monitoring the definition and execution of instrument calibration, ensuring availability of key data for processing.
- Ensuring timely availability of inputs for on-ground characterisation and in-orbit commissioning campaigns.
- Interfacing and coordinating with the science team and user groups in conjunction with Eumetsat.
- Participating in instrument and satellite project reviews coordinating all aspects relating to the instrument.
- Monitoring, with Radiometers Performance Engineer support, the development of performance assessment tools, including instrument simulators and models in industry or internally, analysing mission-performance impacts resulting from deviations during instrument or system development.
- Supporting satellite AIV activities, preparation of the launch campaign and in-orbit commissioning of the instrument.
- Monitoring the MWI risks and associated mitigation actions, including completion of ESA pre-development life

test activity.

The postholder will be supported by a Radiometers Performance Engineer and by specialist engineers from within the MetOp-SG team and from ESA's Technical Directorate as appropriate, and is expected to cooperate closely with other members of the MetOp-SG Programme Team.

Technical competencies

Experience in spaceborne microwave instrument development
Experience in the management and monitoring of industrial activities, including participation in reviews
Technical knowledge of microwave instruments (including radiometers expertise)
Experience in instrument performance and verification
System awareness (e.g. accommodation of instrument on satellite, end-to-end aspects)
Experience in multi-agency cooperative programmes
Knowledge/experience of Technical support within ESA, ensuring best level technical support for the Project

Behavioural competencies

Communication
Planning & Organisation
Problem Solving
Responsible Decision-Making
Results Orientation
Teamwork
Self Motivation
Integrity
Preparation for interview

Education

Engineering degree (Master level) or equivalent qualification in a relevant physical sciences.

Additional requirements

Applicants should have extensive experience in the deployment of high performance microwave radiometer instruments for space applications. Solid, hands-on experience in instrument development in a project/procurement environment is required. A demonstrated ability to work within a multi-agency cooperative programme is an advantage.

Other information

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. The Agency may require applicants to undergo selection tests.

The closing date for applications is 09 September 2018.

If you require support with your application due to a disability, please email contact.human.resources@esa.int.

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 and Slovenia.

According to the ESA Convention the recruitment of staff must take into account an adequate distribution of posts among nationals of the ESA Member States. When short-listing for an interview, priority will first be given to internal candidates and secondly to external candidates from under-represented Member States. (<http://esamultimedia.esa.int/docs/careers/NationalityTargets.pdf>)

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.

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.