

EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Science

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 MIRI System Engineer in the JWST Science Operations Team, Operations Development Division, Operations Department, [Directorate of Science](#).

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

LOCATION Space Telescope Science Institute, Baltimore (USA).

DUTIES As part of its collaboration with NASA on the James Webb Space Telescope (JWST), ESA is building up a Science Operations Team that will support the testing, commissioning and operations of the NIRSpec near-infrared spectrograph (provided by ESA) and of the MIRI mid-infrared imager and spectrograph (provided by a consortium of European institutes (EC)).

The ESA JWST Science Operations Team is based at the Space Telescope Science Institute (STScI) in Baltimore, which is under contract with NASA to serve as the science and operations centre for JWST.

In this context, the postholder will join the ESA JWST Science Operations Team and is expected to bring in direct expertise on the MIRI instrument.

The incumbent will report to the Science Operations Development Manager of the ESA JWST Science Operations Team.

In addition to working with the ESA JWST Science Operations Team, the postholder will also work in close collaboration with the ESA JWST Project Team, the ESA JWST Project Scientist, the MIRI European Consortium and Test Team, STScI and the NASA JWST Project Team.

The main tasks during the pre-launch phase of the mission will include:

- liaising with the Optical Telescope Element and Integrated Science Instrument Module (OTIS) team and representing ESA at regular integration and test events to ensure proper, safe MIRI test definition and test execution at OTIS and observatory level;
- working with the MIRI EC on supporting the planning and execution of the JWST ground calibration campaigns involving MIRI in the USA;
- ensuring and coordinating a consolidated European position on MIRI issues with MIRI EC management;
- representing ESA in the MIRI Management Team (MMT) and closely monitoring the cryo-cooler development;
- supporting the planning of the detailed content and the execution of the MIRI on-orbit commissioning and calibration programme.

Following successful commissioning and transition to the nominal operation phase, the incumbent's tasks will include:

- providing MIRI-focused system engineering support;

- leading the health monitoring of MIRI and anomalies investigations leasing with MIRI EC and prime contractors as needed;
- supporting the optimisation of MIRI operations to maximise its scientific return throughout the mission lifetime;
- supporting JWST engineering activities as required.

In addition to the above functional duties, the incumbent is expected to participate in other Science Directorate tasks where their experience can be brought to bear.

The successful candidate will be expected to take up duty at STScI no later than early 2017 in order to contribute to the final calibration campaign at the Johnson Space Flight Center and a successful commissioning phase.

QUALIFICATIONS

Applicants for this post should have a PhD or equivalent qualification in engineering, physics or a related discipline.

Candidates must have several years of experience in the development and testing of infrared instruments for space science applications.

A broad background in the various technical disciplines involved in science payload engineering, including thermal control, mechanical accommodation, optical interfaces, power interfaces and data handling, is particularly important.

Expertise with integral field units, coronagraphy, and mid-infrared detector systems is considered a key additional asset.

Prior knowledge of the MIRI instrument is a distinct advantage.

Applicants should have excellent analytical and communication skills, and a pragmatic and proactive attitude to resolving problems. They should also have good interpersonal skills, with the ability to work effectively in an international team environment.

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 **11 January 2017**.

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, ESA, 8-10 rue Mario-Nikis, 75738 Paris, Cedex 15 (France).

ESA staff members wishing to apply should fill in the [Internal Application Form](#) and email it to Apply2HQ.

The Agency may require applicants to undergo selection tests.

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.

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.