EUROPEAN SPACE AGENCY

System Engineer

Job Req ID: 11956

Closing Date: 11 April 2021
Publication: Internal & External
Vacancy Type: Permanent
Date Posted: 12 March 2021

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. For this purpose, we welcome applications from all qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.

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

Location

ESTEC, Noordwijk, The Netherlands

Description

The Astrophysics and Fundamental Physics Missions Section (SCI-FMA) of the Science Missions Studies Division (SCI-FM), in the Future Missions Department (SCI-F), Directorate of Science handles all aspects of Mission System Studies (assessment/definition Phase 0/A/B1) of future astrophysics and fundamental physics science missions. The Section is working closely together with the Instrument Studies Section (SCI-FIS) for payload related aspects, and the Technology Preparation Section (SCI-FT) for technology development activities.

Duties

Duties are focused (but not limited) to the preparatory studies of future missions of ESA's Science Programme. Reporting to the Head of Section, specific tasks include:

- Leading or supporting assessment/definition studies for future Cosmic Vision/ Voyage 2050
 missions. This covers internal studies done by the Agency and the management of study contracts
 placed with European industry, including invitation-to-tender preparatory activities and the technical
 follow-up of industrial teams;
- For a given mission study, interfacing on technical matters with relevant external bodies; science study team (in liaison with the study scientist), specific technical working groups, ESOC and ESAC, payload study teams for payload definition and possibly international partner technical teams;
- For a given mission study, leading an internal team composed of support specialists from technical and operation directorates and from the Science Future Missions department itself,
- Contributing to the identification, preparation and execution of technology development activities as part of the Science Core Technology Programme in cooperation with the Technology Preparation Section,
- Contributing to technical and programmatic analysis (technical feasibility, schedule, cost and risk assessment) for future science missions and their payloads;
- For Missions of Opportunity in the area of astrophysics and fundamental physics supporting the coordination/execution of ESA contributions to partner Space Agencies.
- Contributing to the renewal of the Science Programme and related calls for themes and missions.
 That includes preparation of technical call information, proposal evaluation and conduct of phase 0 studies of selected candidates.
- Contributing to generic section, office and department tasks as these arise (such as reporting, reviews, evaluations, etc.)

Technical competencies

Extensive experience in space mission studies or projects

Space System engineering and understanding of system requirements and interfaces (including payloads)

Management of industrial activities including reviews

Knowledge of cost estimation, including industrial costs and schedule aspects

Knowledge on Astrophysics and Fundamental Physics Missions

Behavioural competencies

Result Orientation
Operational Efficiency
Fostering Cooperation
Relationship Management
Continuous Improvement
Forward Thinking

Education

A PhD or Master's Degree in engineering or applied physics is required.

Additional requirements

You should:

- be skilled at fostering cooperative and effective interaction with ESA stakeholders, scientific institutions and industry
- have the capability to work independently
- · be system and results oriented
- have excellent communication skills

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.

At the Agency we value diversity and we welcome people with disabilities. Whenever possible, we seek to accommodate individuals with disabilities by providing the necessary support at the workplace. The Human Resources Department can also provide assistance during the recruitment process. If you would like to discuss this further please contact us at 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, Latvia 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. (https://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.