Job Req ID: 12187
Agency: ESA

Advanced Concepts and Studies System Engineer

EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Technology, Engineering and Quality.

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.

Post
Advanced Concepts and Studies System Engineer

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

Location

ESTEC, Noordwijk, The Netherlands

Description

System Engineer in the Advanced Concepts and Studies Office, Systems Department, Directorate of Technology, Engineering and Quality.

The Advanced Concepts and Studies Office provides support to ESA programmes and projects and carries out technology research (R&D) and system studies. It ensures the overall coordination, coherence and performance of programme and corporate studies for preparation of the Agency's future activities, in line with its long-term strategic objectives and priorities.

Its responsibilities include managing the Discovery and Preparation activities under Basic Activities, including the Advanced Concepts Team (ACT), ESA's in-house research think-tank, to provide support to all the Agency's programmes and in particular the Director General.

Duties
You will report to the Head of Office and divide your time roughly evenly between Advanced Concepts Team tasks and Discovery and Preparation study tasks. Your main tasks and responsibilities will include:

• Providing fundamental and theoretical physics expertise for research performed by the Advanced Concepts Team (ACT);
• Providing physics and general system engineering expertise to calls for ideas, especially via ESA's Open Space Innovation Platform (OSIP);
• Ensuring an efficient information flow between activities run or funded by the Discovery and Preparation elements under Basic Activities, especially activities resulting from calls via OSIP, and the Advanced Concepts Team;
• In close coordination with and in support to the scientific coordinator of the Advanced Concepts Team,

defining and implementing team evolution in terms of scientific competences, including anticipating science and technology trends;
• Connecting ACT researchers (post-doc research fellows, young graduate trainees, and visiting researchers and interns) with TEC competence domains, cross-cutting technology development initiatives, activities aimed at achieving the ESA's Technology Strategy objectives, and application-oriented teams in the different directorates (e.g. Phi-Lab, Spaceship EAC);
• Supporting the preparation and implementation of the Preparation element under Basic Activities for ESA's future missions;
• Helping prepare and implement technology developments with respect to the Discovery element under Basic Activities;
• Organising the introduction and follow-up of the ESA Initial Support for Innovation (EISI) scheme for Discovery element activities;
• Contributing to achievement of the strategic, organisational and financial objectives of the Discovery and Preparation elements under Basic Activities;
• Contributing to the Office's reporting, including internal assessments on advanced concepts not yet linked to space;
• Contributing to dissemination of the results of activities performed and the transfer of knowledge across ESA.

Duties may also include providing support for other activities in your area of competence.

Technical competencies
General background and specific experience in the technical domains covered by the position
Understanding of and practical experience with related technologies, R&D trends and the industrial landscape
Spacecraft systems knowledge
Experience in preparation of procurement activities for technology development and innovation (statements of work, proposal evaluation)
Experience in managing and monitoring industrial activities, participation in reviews

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

Education

A PhD in physics is required.

Additional requirements

A strong background in physics and experience in advanced space research and engineering.
Substantial experience of working in an academic research environment.
Experience and expertise in multidisciplinary research and open innovation.
Experience with the open science paradigm and tools.
Familiarity with the academic landscape related to the technical domains covered by the position.

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 8 April 2021.

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.