



2021-IPR-GII7-FGIV-018655

**FG IV - Project Officer- Mechanical Designer for nuclear safeguards and nuclear security****POSITION FOR:**

Member of the contract staff FGIV – art. 3b of the Conditions of Employment of Other Servants  
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1962R0031:20110101:EN:PDF>

**WE ARE:**

As the science and knowledge service of the Commission, the mission of DG Joint Research Centre (JRC) is to support EU policies with independent evidence throughout the whole policy cycle.

The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: <https://ec.europa.eu/jrc/>

The Nuclear Security Unit of the Directorate for Nuclear Safety and Security provides enabling research, technology and instruments for nuclear safeguards and security to inspection agencies, States and operators. Activities range from nuclear non-destructive analysis and process monitoring to containment & surveillance, verification and detection technologies.

Nuclear safeguards are facing new challenges related mainly to the increasing amounts of materials and to the new facilities (such as storage and geological repositories) to be safeguarded. The Nuclear Security unit is providing support to the Euratom and IAEA inspectorates for the development of innovative components, systems and approaches to enhance the efficiency of safeguards' systems. Strengthening the in-house capacity to design and prototype new mechanical solutions is going to accelerate the development and deployment of new solutions.

**WE PROPOSE:**

The present position is for a mechanical designer in the Engineering Pole of the unit, supporting the projects in the unit with the design and production of mechanical components and systems. The position will provide the mechanical support to the experimental facilities of the unit, and the prototyping of components and systems for the proof of new concepts and designs, in the field of containment and surveillance of nuclear materials, but also in Non Destructive Assay systems and other areas of nuclear security.

We look for an expert in the use of advanced mechanical design tools, with the capacity to quickly understand and translate into design the needs of a research and development team. The expert will have a central role in documenting and testing the mechanical parts and systems needed by the unit and the external stakeholders. Ability in the use of mechanical simulation tools will allow to interface mechanical and radiation transport simulations to provide global simulation tools for the application in nuclear safeguards and security. The expert will design, develop and make available complete mechanical products that will respond initially to the expressed needs of Euratom inspectorate and subsequently to other requests from the unit teams.

**WE LOOK FOR:**

Essential:

- Master degree in mechanical engineering (or equivalent) and 5 years job related experience or Bachelor Degree in mechanical engineering (or equivalent) and 7 years job related experience.
- At least 5 years job related experience in CAD design (Solidworks or equivalent);
- At least 2 years' experience in CAD information management systems (Solidworks PDM or equivalent)
- At least 2 years' experience in finite element simulation (linear and non-linear)

Advantage

- At least 1-year experience in the field of nuclear safeguards and nuclear non-proliferation
- Good knowledge of French or Italian.

We look for an enthusiastic, motivated and passionate colleague, with a strong problem-solving attitude, proven communication skills, the ability to work in a team, the capacity to take initiatives and to work autonomously. A good command of English (B2), both oral and written is required.

**INDICATIVE CONTRACT'S DURATION:**

36 months initial contract with possible renewals up to maximum 6 years.

**PLACE OF WORK:**

Ispra (IT)

**ELIGIBILITY CRITERIA:**

Candidates for this contract agent post shall:

– (i) have passed a valid EPSO CAST selection procedure;

or

– (ii) be registered in the EPSO Permanent CAST [https://epso.europa.eu/documents/2240\\_en](https://epso.europa.eu/documents/2240_en)

or

- (iii) be registered in the specialised call for researchers <https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-iv-researchers> (used mainly by the JRC).

With a valid application number to one of the above, you may then apply for this specific vacancy at JRC through: <http://recruitment.jrc.ec.europa.eu/?type=AX>.

**RECRUITMENT POLICY:**

The Joint Research Centre

- Cultivates a workplace based on respect for other people and the environment.
- Embraces non-discriminatory practices and equality of opportunity. In case of equal merit, preference will be given to the gender in minority.