



2020-IPR-GII7-FGIV-015233

**FG IV - PROJECT OFFICER - SCIENTIFIC
RESEARCH FOR NUCLEAR SAFEGUARDS
AND SECURITY**

<p>Position for:</p> <p>FIV-Project Officer - Scientific Research</p>	<p>As the science and knowledge service of the Commission, the mission of DG Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.</p> <p>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/</p> <p>The current vacancy is in the Directorate for Nuclear Safety and Security, Department of Nuclear Security and Safeguards, Nuclear Security unit, located in Ispra, Italy.</p> <p>The unit provides support mainly to Euratom Inspectorate for the implementation of nuclear safeguards in the European member states. It also operates nuclear laboratories where novel detection and characterisation systems are developed and tested. Complementarily, the unit carries out desktop research activities to support the combat against nuclear proliferation and the control of dual use export and of the trade of strategic goods.</p> <p>The jobholder will bring novel ideas and capabilities in the area of Non Destructive Assay (NDA) techniques for the detection and the quantification of special nuclear materials and radioactive sources. S/he will keep abreast of the latest technological advances with respect to detection systems and data acquisition systems.</p> <p>The jobholder will design and execute laboratory experiments, and develop innovative equipment based on the application of neutrons, gamma rays, muons and anti-neutrinos. In particular, s/he will investigate and apply digital techniques for the improvement of nuclear technologies to complement the theoretical research activities through the design, modelling and implementation of experiments, making use of the equipment and materials available in the INS3L laboratory in exploring the use and the application of digital technologies to increase the efficiency and effectiveness of nuclear detection and characterisation devices. Modelling capacities would be an advantage.</p> <p>The selected candidate will contribute to research activities of the new Ispra Nuclear Safeguards, Security and Standardisation Laboratory (INS3L) and will collaborate in the definition of new research lines in nuclear detection and characterisation in collaboration with the other Directorate G sites.</p> <p>The research results shall lead to proof of concepts and to applications in the field of nuclear security and safeguards, with technical readiness levels allowing to bring them to a full deployment level.</p>
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	<p>Qualifications:</p> <p>The ideal candidate must hold a 5 years degree in Engineering or Physics and a PhD in nuclear technology (or equivalent). An excellent insight and at least 3 years experience in very recent state of the art R&D in the field of nuclear Non Destructive Assay is essential, including particle generation and state of the art particle detection.</p> <p>In addition, very deep theoretical understanding of particle transport theory, and at least 2 years experience in statistical methods including Monte Carlo simulation techniques and variance reduction methods are requested.</p> <p>A strong problem solving attitude, proven communication skills, the ability to work in a team, the capacity to take initiatives and to work autonomously are also needed.</p> <p>A good command of English (C1), both oral and written is required.</p> <p>The following elements will be considered as advantages: a good knowledge in the domain of imaging, tomography, radiation hardening, compressed sensing, lasers, plasma physics; working experience in international laboratories active in the field of nuclear security and safeguards is to be considered as an important advantage.</p> <p>Additional language skills (in particular Italian and French) as well as experience as trainer in the field of nuclear security or nuclear safeguards will also be considered as advantages.</p>
<p>Directorate Unit</p>	<p>Nuclear Safety and Security Nuclear Security</p> <p>Further information: https://ec.europa.eu/jrc/</p>
<p>Indicative duration</p>	<p>36 months initial contract with possible renewals up to maximum 6 years</p>
<p>JRC Site Country</p>	<p>Ispira Italy</p>
<p>Rules and eligibility</p>	<p>The candidate must be on a valid EPSO reserve list for Function Group IV contract staff.</p> <p>If you are not in any valid EPSO reserve list for Function Group IV contract staff, you can still apply by following these steps.</p> <p>You express your interest by applying to the CAST Permanent or to the permanent JRC Call for researchers.</p> <p>1. CAST Permanent: open-ended selection procedure to create a pool of candidates from which the institutions, bodies, offices and agencies of the European Union (EU) can recruit contract agents.</p> <p>https://epso.europa.eu/documents/2240_en</p>

2. JRC Call COM/1/2015/GFIV – Research: open-ended selection procedure to create a pool of candidates from which mainly the JRC can recruit contract agents FGIV as researchers. Details available at the link below:

<https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-IV-researchers>

Only then you can apply for this specific position, through <http://recruitment.jrc.ec.europa.eu/?type=AX>

Auxiliary contract staff:

<https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/contract-staff-members>

Article 3b of the Conditions of Employment of Other Servants of the European Union applies: the actual period of employment within the Commission under this type of contract, including any period under renewal, shall not exceed 6 years.

Please note that in case a high number of applications is received only shortlisted candidates will be contacted.