



2021-IPR-J-000-018428

Trainee on radiochemical techniques

<p>Position for:</p> <p>Trainee</p>	<p>As the science and knowledge service of the Commission, the mission of 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: Error! Hyperlink reference not valid.</p> <p><u>Short description of activity:</u></p> <p>Site Laboratory for Radioactivity Measurements (LMR) of Ispra Decommissioning and Waste Management Safety and Security Sector JRC Ispra is in charge of environmental monitoring program and supports the activities of pre-characterisation of the nuclear facilities of JRC Ispra. Determination of Hard-To-Measure (HTM) radionuclides and measurement of gamma emitting radionuclides require several fundamental and ancillary activities. Among the others, sampling and preparation of samples, calibration of radiation detectors and interpretation of results. The candidate will help LMR in designing several test methods for the determination of gamma and HTM radionuclides. More specifically:</p> <p>He/She will identify, in cooperation with the LMR responsible, the best standard procedures available as international standards or in the literature;</p> <p>He/She will draft, in cooperation with the LMR responsible, the test method to be used for characterising potentially clearable material using Gamma Spectrometry Monitoring System, and/or the test methods for determining HTM radionuclides such as ^{55}Fe, ^{59}Ni, ^{63}Ni, ^{90}Sr;</p> <p>He/She will assist LMR personnel in designing a test method for determining isotopic ratios $^{135}\text{Cs}/^{137}\text{Cs}$ in environmental matrices through</p>
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Sector Field Multi-Collector ICP-MS;
He/She will design, in cooperation with the LMR quality and radiometric sectors' responsible, a program of validation of the test methods;
He/She will perform, in cooperation with the technicians of LMR, the measurements optimizing the operative conditions and the relevant parameters.

Qualifications:

Master's degree in physics, chemistry, nuclear engineer, radioprotection, or equivalent obtained in the last two years or willing to perform the work thesis for gaining the master's degree in the same disciplines listed before.

Essential:

Sound knowledge of radiometric techniques;

Sound knowledge of the main quality laboratory principles (as per ISO/IEC 17025:2017).

Candidates from Member States must be independent users of at least two Community languages, one of which should English. The required level of the English language is B2 according to the CEFR5 (Common European Framework of Reference for Languages: Learning, Teaching Assessment).

Candidates from non-Member States must be independent users of at least English. The required level of the English language is B2 according to the CEFR (Common European Framework of Reference for Languages: Learning, Teaching, Assessment).

Advantage:

Laboratory experience and/or knowledge of Montecarlo code;

Knowledge of the main chemical separation techniques (e.g. chromatography).

For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:

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

Unit /Directorate	Directorate J Sector J.002
Duration	5 months
Preferred starting date	As soon as possible
JRC Site	Ispra
Country	Italy
JRC contact details	For any technical problems with your application, please contact: HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu