



**2018-PTT-G-000-010524**

**Sample preparation and nanoindentation testing**

**Position for:**

Trainee

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.

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

**Short description of activity:**

The JRC is involved in several international projects with the aim to develop new methodologies for (micro-)mechanical testing in quasi-static and dynamic modes, at room temperature and high temperatures. In particular, nanoindentation is used as a mechanical testing technique that allows extracting local information of the mechanical properties of materials, such as hardness and elastic modulus. In this context, we are looking for a trainee to assist in the preparation of specimens and in the operation of equipment to set-up experiments, program and launch data acquisition matrices. The trainee will also perform post-processing of data, prepare data analysis reports and store the data in a materials database. A significant share of the work will be carried out in the laboratory followed by statistical analysis and data management.

**Qualifications:**

We are looking for a trainee who has at least a bachelor degree in physics, materials science, mechanical engineering or a similar subject. If there is interest and with the agreement of the candidate's university faculty, the work could be carried out in the framework of a master thesis.

**Essential:**

Knowledge of materials science, physics or engineering.

	<p>Good knowledge of English (B2 level)</p> <p><u>Advantage:</u>  Knowledge in mechanical testing or mechanical properties of materials.  Knowledge of metallographic preparation (grinding, polishing) or microstructural analysis (electron microscopy).</p> <p><b><u>For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:</u></b></p> <p><a href="https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees">https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees</a></p>
<b>Unit /Directorate</b>	<p>G.I.4 - Nuclear Reactor Safety and Emergency Preparedness  Directorate G – Nuclear Safety and Security</p> <p>Further information:  <a href="https://ec.europa.eu/jrc/en">https://ec.europa.eu/jrc/en</a></p>
<b>Indicative duration</b>	5 months
<b>Preferred starting date</b>	As soon as possible
<b>JRC Site</b>	Petten
<b>Country</b>	THE NETHERLANDS
<b><u>JRC contact details</u></b>	<p><b>For any technical problems with your application, please contact:</b>  <a href="mailto:HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu">HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu</a></p>