

2018-PTT-A5-FGIV-9904	Exploratory Research Project Novel Micromechanical Testing Methods for the Characterization of Nuclear Materials /µMech
Position for: FG IV Scientific Project Officer	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. The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: http://cc.europa.eu/rc/ The Exploratory Research Programme (ER) is a strategic initiative characterised by ideas that may lead to novel results, which are going to qualitatively enrich the current scientific work at the JRC. The JRC is offering a position for a contract agent in the context of the µMech exploratory research project. <b>Short description of activity:</b> The main activity concerns the development of novel micromechanical tests based on the in-situ deformation of metallic membranes produced by microfabrication techniques. The aim of the project is to develop a new methodology, including sample preparation, measurement procedures and data treatment and analysis, for mechanical testing of structural materials for nuclear applications. The candidate will be in charge of performing micromechanical testing ex-situ (using a nanoindentation set-up) and in-situ (inside a SEM). As well, he/she will be responsible for post-test examinations by electron microscopy, analysing the data and reporting. <b>Qualifications:</b> • Doctoral degree (or equivalent) in Physics or Materials Science or related field. As equivalent is considered a University degree giving access to doctoral studies and 5 years of research experience in a field relevant to the position. • Knowledge in nanoindentation, micromechanical testing and electron microscopy (SEM/TEM) is essential. • Knowledge of metallographic preparation, microfabrication techniques, and mechanical testing and electron microscopy (SEM/TEM) is essential. • Knowledge of materials and modelling of physical properties will be an advantage. • Good oral and written communication skills in English (B2) are essential, knowledge of other languages an asset.

	<ul> <li>In addition, the following elements will be considered as an advantage:</li> <li>Ability to work in a team and multi-cultural environment</li> <li>The candidate is expected to be creative and work independently.</li> </ul>
Directorate Unit	Nuclear Safety and Security Nuclear Reactor Safety & Emergency preparedness
Project	The Scientific Development Unit of the Strategy and Work Programme Coordination Directorate is in charge of the overall JRC Exploratory Research Programme; The operational scientific research will take place in the Nuclear Reactor Safety & Emergency preparedness Unit. Exploratory Research Project µMech (Novel Micromechanical Testing Methods for the Characterization of Nuclear Materials)
	Further information: https://ec.europa.eu/jrc/en/science-area/nuclear- safety-and-security
	https://ec.europa.eu/jrc/en/research-topic/nuclear- safety
Indicative Duration	24 months
JRC Site	Petten
JRC Site Country	Petten The Netherlands
	The Netherlands The candidate must be on a valid EPSO reserve list for
Country	The Netherlands The candidate must be on a valid EPSO reserve list for Function Group IV contract staff. Applicants to the following Calls for expression of interest
	<ul> <li>The Netherlands</li> <li>The candidate must be on a valid EPSO reserve list for Function Group IV contract staff.</li> <li>Applicants to the following Calls for expression of interest can also be considered:</li> <li>1. CAST Permanent - EPSO has launched in January 2017 an 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. Details available at the link below:</li> </ul>
Country	<ul> <li>The Netherlands</li> <li>The candidate must be on a valid EPSO reserve list for Function Group IV contract staff.</li> <li>Applicants to the following Calls for expression of interest can also be considered:</li> <li>1. CAST Permanent - EPSO has launched in January 2017 an 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. Details available at the link below: https://epso.europa.eu/documents/2240_en</li> <li>2. Call COM/1/2015/GFIV – Research - The JRC has launched in January 2015 a permanent call for researchers FG IV. Details available at the link below: https://ec.europa.eu/jrc/en/working-with-</li> </ul>