EUROPEAN COMMISSION
DIRECTORATE-GENERAL HUMAN RESOURCES AND SECURITY
Directorate HR.AMC – Account Management Centre
HR.DDG.AMC 8

2021-PTT-G-000-017568	**Corrosion and in-environment mechanical material 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 The mission of the JRC Directorate G for Nuclear Safety and Security is the implementation of the JRC Euratom Research and Training Programme as well as the maintenance and dissemination of nuclear competences in Europe to serve both "nuclear" and "non-nuclear" Member States. The JRC Directorate G supports the relevant policy Directorates General and is a key partner in international networks, collaborating with International Organisations as well as prominent Academic and Research Institutions. The Unit G.I.4 is a part of Department I for Nuclear Safety within the Directorate. The major objective of the Department is to provide scientific support to the EU nuclear safety policy. The Unit G.I.4 contributes to technological innovation of nuclear reactor safety through experimental testing, numerical simulation and modelling. **Short description of activity:** Environmentally Assisted Degradation such as stress-corrosion cracking (SCC), liquid metal embrittlement (LME), and general corrosion of structural materials are key life-limiting and safety-related factors for nuclear components. In the frame of the current activities of the Unit, corrosion and mechanical properties are investigated through dedicated research in the JRC Euratom facilities AMALIA (in water

	environment), SMPA (reference tests in air), and LILLA (in lead environment), belonging to the Environmental and Mechanical Materials Assessment (EMMA) infrastructure. The trainee's activities will encompass: (i) set-up and calibration of test sections that will be used for LME, SCC, corrosion, and reference mechanical tests; (ii) execution of experiments; (iii) data evaluation; and (iv) reporting and presentation of the results. **Qualifications:** The candidate should be of type 1 or 2 (as stipulated in the Rules governing the Traineeship Scheme). University degree in the fields of material science, physics, nuclear engineering, mechanical engineering or chemistry. Good knowledge of spoken and written English is required (minimum of B2 level) **Essential:** In addition, excellent work ethics, team-working as well as good communication skills are essential. **Advantage:** Prior experimental experience and knowledge of corrosion phenomenology and mechanical properties of steels & alloys are assets. **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 G - Nuclear Safety and Security Unit G.I.4 - Nuclear Reactor Safety and Emergency Preparedness https://ec.europa.eu/jrc/en/science-area/nuclear-safety-and-security https://ec.europa.eu/jrc/en/research-facility/amalia-laboratory-ageing-materials-under-effect-environmentally-assisted-stress-corrosion-cracking https://ec.europa.eu/jrc/en/research-facility/liquid-lead-laboratory-lilla
Duration **Preferred starting date**	5 months As soon as possible
JRC Site **Country**	Petten The Netherlands
JRC contact details	**For any technical problems with your application, please contact:** HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu