



2019-IPR-C-000-012754

SGI – Smart Grid Interoperability

Position for:

Trainee JN 323716

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:

Among other activities, the unit conducts studies related to the interoperability aspects of smart grid systems. The Smart Grid Interoperability Laboratory (SGILAB) in Ispra works on the different layers of the smart grid architecture, from protocols and communications, to devices and subsystems. Among many others, it is equipped with real time simulators, energy storage systems and a large ICT infrastructure that will enable the emulation of complex communication scenarios.

The main activity of the trainee will be helping in Power Hardware in the Loop (PHIL) experiments, making use of the Real Time digital simulator and the Power Amplifier lab equipment. The activities can range from drawing reference distribution grids for simulation, analysis of the results and writing conclusions. The main target hardware is Electric Vehicle (EV) chargers and PV panels including inverters or other active Smart Grid assets. The focus of analysis is Power quality under nominal behaviour and under stress conditions.

Qualifications:

On site trainings and introduction will be provided on most topics related to the development of the laboratory.

Essential:

However, the applicant should have electricity, mechanical, electronic engineering degree or similar training. S/he should have some

	<p>knowledge of Matlab/Simulink, good knowledge of Excel and Word tools as well as of Power systems and simulation software.</p> <p>A good oral and written knowledge of English is required (at least level B2).</p> <p><u>Advantage:</u> Good communication skills, team work, creativity, perseverance, and the ability to search through data, to analyse, and to summarise critical information is desired.</p> <p><u>For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:</u></p> <p>https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees</p>
Unit /Directorate	<p>Unit C3 Energy Security, Distribution and Markets in JRC Directorate C - Energy, Transport and Climate</p> <p>Further information: http://ses.jrc.ec.europa.eu/</p>
Indicative duration	5 months
Preferred starting date	15/01/2020
JRC Site	ISPRA
Country	ITALY
<u>JRC contact details</u>	<p>For any technical problems with your application, please contact: HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu</p>