EUROPEAN COMMISSION

JOINT RESEARCH CENTRE

2021-IPR-C4-FGIII-017409

FG III - PROJECT ASSISTANT WITH INFORMATICS, POWER- ELECTRONICS AND EMC -RELATED TASKS IN ELECTRIC VEHICLES AND CHARGER TESTING

POSITION FOR:
Member of the contract staff FGIII – art. 3b of the Conditions of Employment of Other Servants http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1962R0031:20110101:EN:PDF)

WE ARE:
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: https://ec.europa.eu/jrc/

Within the Directorate for Energy Transport and Climate, the Sustainable Transport Unit (STU) performs inter alia pre-normative, experimental research on electric vehicles and recharging infrastructures - how they function safely and efficiently, and integrate into Smart Electric Grids. The work relates directly to policy support for primarily DGs MOVE and ENER, but also DGs R&I, CNECT and GROW. The DEILL Project-team members in the STU are involved in well-established international and European networks and partnerships e.g., the JRC – U.S. DoE collaboration with Nat. Laboratories ANL, INL, ORNL and NREL, the CEN-CENELEC Coordination Group Electro-mobility, the EU Sustainable Transport Forum, and the EGVI SRIA 2ZERO WG2, etc., and feature a track record of continued engagement at IEEE Conferences.

The team runs the European Interoperability Centre for Electric Vehicles and Smart Grids. Our research is perceived well at EU and global scale and geared at underpinning the electromobility , and vehicle-to-grid- best practice, regulations and -legislation of tomorrow.

WE PROPOSE:
The job holder will be responsible for activities related to the testing, enabling, installation and use of software and industrial electronic / power electronic devices in the field of electric vehicles' EMC (electromagnetic compatibility) -testing, and charging technology-testing (both, cable bound and inductive).

Extensive technical preparation work before the actual testing is intrinsic and typical in this field, an the job holder will pro-actively participate in testing methodology development with regard to electromagnetic emissions and immunity. (S)He shall handle software-steered power calibrations and amplifiers, result data management for straight-forward interpretation and back-ups, software and driver-issues incl. frequent updates in industrial electronic devices, data protection and licencing aspects. Professional approaches to automated data handling and transmission, knowledge of communication protocols notably including VPN, also towards back-end applications in industrial power electronics are to be applied. Higher-level communication in electro-mobility evolves at a remarkable pace and analysis of RFID-, mobile app- and other HMI technologies, billing-related informatics, cybersecurity and security risk assessments in EVs and chargers are already adding to this technical task portfolio.

Though the job is demanding, full of new challenges, and multidisciplinary, it will be carried out in a very well-established team-spirit and closest collaboration with colleagues within the DEILL-team, the STU, the Directorate, and other Directorates of the JRC and Directorates General of the European Commission.

WE LOOK FOR:
We look for a person with proven experience in IT applications and industrial electronics, notably communication protocols, VPN-applications, etc., combined with a track record of having managed applied operating systems, data logging, real-time communication for monitoring purposes, and

software development. Experience in electric vehicle and related charging technologies will be an asset. The candidate should have a good aptitude of taking initiative, be a problem solver, have joy in participating to develop new testing concepts and be a strong team player.

In addition, the following qualifications are considered as an asset:

- Knowledge and aptitude to grasp new developments of computer- and industrial electronic appliances' operating systems, ISO15118 communication protocols, and/or firmware management, and/or back-end solutions for distributed devices;
- Experience in managing electro-physical and cyber-electronic test-devices and systems
- Proven ability to work in a team and in a multi-cultural environment, incl. aptly, and sometimes patiently keeping up established relationships within the EU, US and Asia, i.e., with world-wide collaboration partners;
- Prior work experience in the domain of software, IT management, organization and integration of technology projects.

Good oral and written communication skills in English (B2) are needed. Additional knowledge of Italian is an asset, also in view of the frequent involvement of the laboratories in popular science and PR -activities.

INDICATIVE CONTRACT'S DURATION:
36 months initial contract with possible renewals up to maximum 6 years.

PLACE OF WORK:
Ispra (IT)

RULES AND ELIGIBILITY:
To be eligible for the position, the candidate must be on a valid EPSO reserve list for Function Group III contract staff.

You can be added to an EPSO reserve list if you complete successfully an EPSO selection procedure.

Candidates who are on a valid EPSO reserve list or have applied to an EPSO selection procedure can apply to this specific position through http://recruitment.jrc.ec.europa.eu/?type=AX.

How to apply to an EPSO selection procedure?

Apply to the permanent EPSO call (CAST Permanent) https://epso.europa.eu/documents/2240_en. This reserve list is used by a wide range of organisations (institutions, bodies, offices and agencies of the European Union).

RECRUITMENT POLICY:
The JRC
• Cultivates a workplace based on respect for other people and the environment.
• Embraces non-discriminatory practices and equality of opportunity. In case of equal merit, preference will be given to the gender in minority.