



2021-PTT-C1-FGIV-019228

**FG IV – Project Officer – Scientific Research
Battery performance and durability testing****POSITION FOR:**

Member of the contract staff IV – 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 (JRC) 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/>

The current vacancy is in the Directorate for Energy, Transport and Climate, in Energy Storage Unit of the JRC: The Directorate for Energy, Transport and Climate provides support to Community policies in field of sustainable, safe, secure and efficient energy production, distribution and use. Fostering sustainable and efficient mobility in Europe and providing scientific and technical analyses in support to integrated air quality, climate and related policies are also in the area of activities.

The Energy Storage Unit of this Directorate performs scientific research in the fields of battery and hydrogen technologies in support of related European Commission policies. These technologies are enablers of the transition towards less carbon-intensive and hydrogen-inclusive EU energy and transport systems, but it is important to assess their performance, sustainability and safety, to maximise their positive effects.

The Unit achieves its objectives by a mix of laboratories for pre-normative research and desktop analytical activities, and is directly involved in selected Commission energy, industrial, mobility and research and innovation policies.

Further information: <https://ec.europa.eu/jrc/en/research-facility/battery-energy-storage-testing-safe-electric-transport> and <https://ec.europa.eu/jrc/>.

WE PROPOSE:

The Energy Storage Unit is looking for a highly motivated and experienced colleague for the investigation of batteries and battery materials. The focus of the activities will be on the assessment of battery performance and durability, supporting the development or improvement of standardised test procedures on battery cycling.

This may be complemented by other analytical techniques (depending on the successful candidate(s) profile), such as X-ray diffraction (XRD), impedance spectroscopy or different methods of chemical or gas analysis. FTIR, GC, DTA, ICP-OES, are available in the BESTEST laboratory. The successful candidate will work together with a team of engineers and scientists from the Energy Storage Unit.

Specific duties include:

- To operate scientific equipment.
- To define and execute experiments aiming to characterize battery performance and durability including contributing to the characterisation of degradation mechanisms of different Li-ion chemistries.
- To collect and analyse experimental data, to publish results in the peer-reviewed literature.
- Monitoring the implementation of quality, environmental, health and safety system and following legal requirements for laboratory activities. If required, follow and monitor the execution of

equipment supply and service contracts.

- To attend key scientific conferences, communicate with external project collaborators and present our activities and experimental results and findings.
- To contribute to the units' activities supporting European Commission policies in field of batteries performance and durability, in collaboration with the Directorate-General responsible for Environment (DG ENV) and the Directorate-General for Internal Market and Industry (DG GROW).

JRC offers a full time work position in the field of the dynamically developing state of the art battery technologies and related policy. JRC also offers a set of social benefits for its' employees and their families, including health insurance, European School education for children and a work place in the middle of a Nature 2000 dune area.

WE LOOK FOR:

A candidate having completed a university studies of at least three years attested by a diploma, and possessing a PhD in physics, chemistry or a relevant engineering discipline.

Demonstrated experience in laboratory based experimental research and related data processing and evaluation is essential. Having a research experience in battery testing is desirable. Hands-on experience in electrochemical analytical techniques (e.g. cyclic voltammetry and impedance spectroscopy) is required. Experience in X-ray diffraction (XRD) is an asset, in chemical and physical diagnostic techniques including GC/MS, FTIR and TGA is desirable. A general knowledge on European goals and policies with respect to transport and on international regulatory frames for batteries is desirable.

JRC-Petten holds ISO 14001 and ISO 9001 certificates, therefore experience in a work environment with an implemented quality system is an asset. Ability to convey research findings in a clear concise fashion and excellent drafting skills in English are essential. A capability to work as a part of the team is required, but also an ability to work independently under pressure and deliver on time. Respect for the multicultural environment in the group is a must.

INDICATIVE CONTRACT'S DURATION:

36 months initial contract with possible renewals up to maximum 6 years.

PLACE OF WORK:

Petten (NL)

ELIGIBILITY CRITERIA:

Candidates for this contract agent post shall:

- (i) have passed a valid EPSO CAST selection procedure;

or

- (ii) be registered in the EPSO Permanent CAST https://epso.europa.eu/documents/2240_en

or

- (iii) be registered in the specialised call for researchers <https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-iv-researchers>.

With a valid application number to one of the above, you may then apply for this specific vacancy at JRC through: <http://recruitment.jrc.ec.europa.eu/?type=AX>.

RECRUITMENT POLICY:

The Joint Research Centre

- 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.

