EUROPEAN COMMISSION

JOINT RESEARCH CENTRE

2021-IPR-A5001-FGIV-018630	**FG IV Scientist - Exploratory Research Project Evaluation, Assessment and Improvement of Process for Recycling and Reusing Innovative Photovoltaic Solar Cells (Recycle-PSC)**

POSITION AS:
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 JRC offers a position for a Contract Agent within the Exploratory Research Project "Evaluation, Assessment and Improvement of Process for Recycling and Reusing Innovative Photovoltaic Solar Cells" (Recycle-PSC). The JRC Exploratory Research Programme (ER) is a strategic initiative characterised by ideas that might lead to novel results and qualitatively enrich current JRC scientific work.

The vacancy is within the Directorate for Health, Consumers & Reference Materials. The mission of the Directorate is to provide independent scientific evidence for the development, implementation and evaluation of EU policies mainly in the areas of standardisation, public health, food and feed safety and authenticity, cosmetics and other consumer products, medical devices, nanomaterials, taxation with a focus on fraud and a well-functioning EU internal market. The operational scientific research will take place in the Consumer Products Safety Unit.

Further information is available at: https://ec.europa.eu/jrc/en/research-topic/nanotechnology

The Scientific Development Unit is in charge of the overall JRC Exploratory Research Programme.

WE PROPOSE:
A position to carry out scientific and technical tasks within the Exploratory Research Project "Evaluation, Assessment and Improvement of Process for Recycling and Reusing Innovative Photovoltaic Solar Cells" (Recycle-PSC) with special emphasis on materials recovery, physico-chemical analysis and characterisation.

The project aims at contributing to the assessment and development of recycling processes of innovative perovskite solar cells (PSC), which due to low manufacturing costs with low greenhouse gas emissions are likely to reach commercialisation in the future. Since this new generation of solar cells have different properties than previous and require the use of hazardous materials, the project aims at inter alia to support related policies and integrated technologies to develop sustainable PSC products and to evaluate biological and health impacts of recovered materials.

The successful candidate will:
- Perform analysis and evaluation of different published chemical protocols to Recycle-PSC;
- Carry out related experimental work;
- Design and evaluation of possible alternatives routes;
- Report to the Project Leader on progress, achievements and potential problems in a timely manner;
- Provide feedback and maintain interactive communication with colleagues;
- Explain the research activities and achievements to third parties, such as scientific communities and the general public;
- Write, publish and present scientific reports, articles and conference papers;
- Provide regular and accurate reports on scientific activities every twelve months and a final report.

WE LOOK FOR:

A scientist with the following qualifications:

- A doctoral diploma in Materials Science, Physics, Chemistry or related field, alternatively completed university studies of at least three years attested by a diploma and at least two years professional experience in a field relevant to the position;
- Extensive knowledge/experience in materials synthesis and processing techniques (e.g. wet chemistry, electrochemistry) is essential.
- Broad knowledge of physico-chemical characterisation of materials is essential;
- Good oral and written communication skills in English (B2) are essential, knowledge of other languages is an advantage.

In addition, the following competences will be considered as an advantage:

- Knowledge of spectroscopy techniques (e.g. XPS, UPS, ToF-SIMS, UV-vis, XRD, ICP-MS, Raman, nIR) and microscopy techniques (e.g. TEM, SEM, AFM);
- Knowledge of innovative solar cells' development, fabrication and characterisation;
- Knowledge of reprocessing techniques for recycling and reuse of organic and inorganic materials;
- Solid record of research activities relevant for the post including publications in international peer-reviewed journals;
- Ability to work in a team and in a multi-cultural environment;
- The candidate is expected to be creative and work independently.

EMPLOYMENT CONTRACT DURATION:

24 months employment contract for the Exploratory Research Project "Evaluation, Assessment and Improvement of Process for Recycling and Reusing Innovative Photovoltaic Solar Cells" (Recycle-PSC).

Employment contracts for Contract Agents can be renewed for maximum 6 years.

PLACE OF WORK:

Ispra (IT)

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 (used mainly by the JRC).

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.