

Widening Country Inspiration Story

“Make sure to cover all chapters (from the template) clearly and concisely.”

Name of the fellow: Tayebeh Sharifi
Country of the host: Slovenia
Project Acronym: BPEC-DW
Project start and end date: 1.12.2022 – 30.11.2024
Type of MSCA, Horizon Europe: Postdoctoral Fellowship

What is your project about?

Nuclear installations release approx. $4.4E+16$ Bq/year of tritium, the radioactive isotope of hydrogen, into the environment worldwide. At the same time no technologies seem to be technically/ economically viable for water detritiation. With the aim of developing a novel and effective technology, we have proposed a hybrid bio-photo-electrochemical system for detritiation of light-water that can be utilised both for water reuse and hydrogen generation (hydrogen being one of the most effective alternative energy sources).

Why is your project important for society?

This project addresses the pressing issues of clean energy production and sustainable water use. By developing a new system to enrich tritium while generating hydrogen, it contributes to environmental safety and renewable energy goals, reducing greenhouse gas emissions and promoting water reuse.

What communication and public engagement measures have you foreseen?

Public engagement is central to the project, with outreach events such as open days at the Jozef Stefan Institute, European researchers' night and



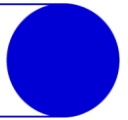
Science is Wonderful! events. These efforts raise awareness about clean energy, water sustainability, and the role of innovative technologies in addressing global environmental challenges.

Why did you choose a widening country as a host?

The widening status of Slovenia didn't factor into my decision. I was primarily interested in applying for the MSCA, and my supervisor's research aligned well with my proposal, which made Slovenia an ideal host. Joining his group felt like the right step for my career, which would allow me to contribute meaningfully to shared research goals.

How did you find your host organisation?

A strong network helps, but you can also reach out directly. I did not know my supervisor initially; we met during a previous event, and I liked his work. Later, when I decided to apply for MSCA, I emailed him, and he was very supportive in helping me prepare my proposal.



What kind of support did you get?

I wrote my proposal with support from my supervisor. We had an online meeting to review each section of the template and discuss key focus areas. After completing my first draft, the proposal was edited multiple times to create the final version. Unfortunately, I did not have access to additional resources during the preparation of my application. However, after starting my fellowship, I attended workshops organised by the National contact point, which were very helpful. I wish I'd had this training beforehand; it would have made the proposal development much smoother.

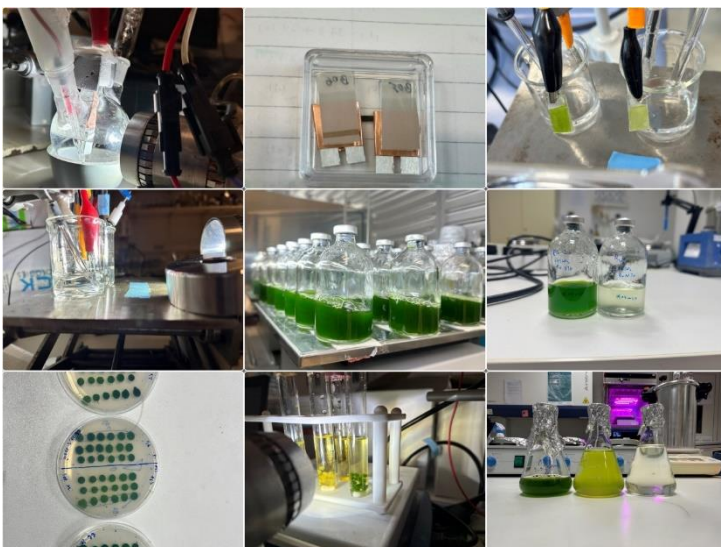
More information on the project:



The Marie Skłodowska-Curie Actions (MSCA) support researchers at all stage of their career across all disciplines. The MSCA also support cooperation between industry and academia and provide innovative trainings and career developments.

The MSCA Postdoctoral Fellowships (PF) enable talented researchers to work on project in Europe and beyond. They aim at enhancing the innovative potential of postdoctoral researchers through advanced trainings, international and intersectoral mobility.

The MSCA-NET project is the MSCA NCP project to facilitate the transnational cooperation to achieve a consistent and harmonised level of NCP support. The scientific community can also profit from our project to support their MSCA application.



What tips can you give other researchers who would like to apply for MSCA?

If you have an innovative idea and are ready to explore new research fields, consider applying for an MSCA fellowship. You can choose a topic that interests you and develop a proposal that would allow you to conduct such research in your host organisation. The template is straightforward and gives you directions on what to write in each section. Make sure to cover all chapters clearly and concisely. Be specific and put effort into all parts for a solid proposal.