

## Widening Country Success Story

“It is important to find a host who is compatible with the scholar’s current research.”

**Name of the fellow:** Ivan Tomac

**Country of the host:** Slovenia

**Project Acronym:** NOSTRADAMUS

**Project start and end date:** 1.10.2021 – 30.09.2023

**Type of MSCA, Horizon 2020:** Individual Fellowship



### What is your project about and why is the topic important for science advancement?

The project addresses the engineering problem of how we can make the lightest possible structure that is also as durable as possible. The problem is addressed by developing a method to remotely detect vibration fatigue (VF) of structures such as: cars and aircraft, focusing on their components. Application of high-speed cameras in VF identification provides a fast and simple set-up to obtain a dense response from complex geometries without contact and pushes the limits in remote sensing.

### Why is your project important for society?

The project aims to accelerate the development of lightweight products in the transportation sector (automotive and aircraft industries) and contributes to the digitisation of industrial components to create more accurate Digital Twin models. The results of the project are disseminated to the scientific public mainly through participation in conferences, video presentations of the journal publications published on YouTube and the project website.

### What communication and public engagement measures have you foreseen?

Communication activities are announced on the social network (X, formerly know as Twitter). Other activities include seminars for students of the Faculty and participation in the EU Researchers’ Night with an interview on NOSTRADAMUS.

### Why did you choose a widening country as a host?

Because the leading research group covering both scientific fields (high-speed image-based identification in structural dynamics and vibration fatigue) is based in Slovenia. There are other research groups that conduct research in these fields, but none of the groups excel in both. In addition, my previous work was compatible with the research, which allowed me to expand my research in the new area and produce results relatively quickly.

### How did you find your host organisation?

While I was working on advanced signal processing methods for modal identification as part of my PhD, I found out about the research group at the host institution. I contacted the host after completing my PhD through the Erasmus+ mobility programme.

### What kind of support did you get?

After a colleague brought to my attention the Marie Skłodowska-Curie actions I contacted the National Contact Point who familiarised me with the rules and procedures. I received full support from the Research Office of the University of Ljubljana (UL) for the preparation of NOSTRADAMUS. By attending the masterclass organised by the UL, I received: general information, the success story of a previous applicant, insights into the evaluation process from an expert and a writing workshop from an external agency. This information was invaluable, especially on my second attempt when I had gained more experience, which allowed me to ask more targeted questions. UL also organised a professional session with a native English speaker as part of the individual sessions to help me write the proposal.

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

It is important to find a host who is compatible with the scholar's current research and who is well established in the areas to which they wish to contribute. This allows for a smooth transition to the host institution and guarantees a two-way transfer of knowledge that will lead to success.

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 Individual Fellowships (IF) provide opportunities to researchers of any nationality to acquire and transfer new knowledge and to work on research and innovation in Europe and beyond.

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.

