

## **PhD Position in Biosciences for MSCA-ITN “HiStabJuice”**

### **Job Description**

The Marie Skłodowska Curie Innovative Training Network “HiStabJuice” is inviting applications for a 25 months full time fixed term position as an Early Stage Researcher. This research project is a collaboration between 18 organisations, including 8 academic and 10 non-academic, from 7 countries (AT, DE, FR, IT, NL, PT, SL) across Europe. The research aims to analyse and compare in a normalised fashion the impacts of various available processing technologies on the stability of colour and nutrients in various fruit juices.

The successful applicant will be employed by University of Ljubljana in Slovenia, with planned intersectoral and interdisciplinary stays with collaboration partners totalling a maximum of eight months.

The research and PhD thesis will be on “Influence of thermal and non-thermal treatments on selected nutrients and the antioxidant capacity of fruit juices and nectars”.

The ESR will:

- compare conventional and non-conventional stabilization methods using juice and nectar obtained from the same raw materials (frozen, same batch) and same log-reduction (5 log and 12-log)
- produce fruit juices and nectars and preserve them with Pulsed Electric Field (PEF) (strawberry, blue grapes, raspberry)
- analyse organoleptic parameters of juices and nectars produced by ESRs 6-10)
- compare the colour stability of these juices and nectars produced under different preservation regimes (Pulsed Electric Field vs conventional heat treatment)
- optimize Pulsed Electric Field stabilization protocols with respect to enzyme inactivation
- perform analysis (kinetics) of selected nutrients (l-ascorbic acid, phenolic compounds) and antioxidant capacities of juices and nectars produced by ESRs 6-10)

Beyond the specific expertise gained during the ESR’s completion of their research work, this position offers an opportunity to gain international research experience, as well as an array of soft skills relevant to project management, research management and career development.

### **Applicant Description**

Candidates must:

- hold a University Master’s Degree in any discipline that makes them eligible for a PhD in biosciences
- not have resided or carried out their main activity (work, study, etc) in Slovenia for more than 12 months in the three years immediately prior to 1<sup>st</sup> September 2022, unless as part of a procedure for obtaining refugee status under the Geneva Convention, but may be of any nationality
- be available to start on 1<sup>st</sup> September 2022
- have excellent English language skills
- be able to travel internationally on a regular basis, for example to attend regular project meetings or to take part in conferences able to work in an international environment, be highly motivated and reliable, be able to work to strict deadlines

Preference will be given to candidates with experience in the food processing and preservation, chemical analysis of fruits and fruit-related products. A background in food technology, biochemistry, analytical chemistry and food processing and preservation is preferable.

### **Research Fields**

Chemistry, biochemistry, food technology, food processing and preservation, microbiology, enzymatics, analytical chemistry

### **Career Stage**

According to EU HORIZON 2020 guidelines, Early Stage Researchers must have fewer than four years research experience at the date of employment (1<sup>st</sup> September 2022), and must not have been awarded a doctoral degree.

### **Benefits**

Annual Salary: within the range of EU Marie Curie European Training Network programs Monthly Mobility Supplement and Monthly Family Allowance (if eligible): according to the rules of EU Marie Curie European Training Network programs.

### **How to Apply**

Please send a letter of motivation and your full CV, along with any supporting documents, as a single PDF to prof. Jerneja Jakopič (coordination.histabjuice@tuwien.ac.at) before 31<sup>st</sup> July 2022. Please include “ESR7 Application” in the reference line. CVs should follow the Europass template available for free download at: [https://www.eea.europa.eu/about-us/jobs/application-documents/europass\\_cv\\_template.doc](https://www.eea.europa.eu/about-us/jobs/application-documents/europass_cv_template.doc).



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