



## PhD Position in Biochemistry / Molecular Biology for MSCA-ITN “HiStabJuice”

### Job Description

The Marie Skłodowska Curie Innovative Training Network “HiStabJuice” is inviting applications for a 36 month full time fixed term position as an Early Stage Researcher. This research project is a collaboration between 17 organisations, including 7 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 Technische Universität Wien in Austria, with planned intersectoral and interdisciplinary stays with collaboration partners totalling a maximum of six months.

The research and PhD thesis will be on “*Characterization of raw material for juice and nectar production and changes in enzyme activities as a function of cultivar, freezing, ripeness and harvest time*”.

The ESR will:

- use strawberry as a typical representative for fruits with low colour stability
- analyse the activities of endogenous enzymes presumably involved in colouration degradation (PPO, POD, AOX, beta-glucosidase) as a function of cultivar, ripening stage and harvest time
- characterize the relevant enzymes with respect to D- and z-values (rate constant (k) and activation energy (E<sub>a</sub>))
- evaluate the influence of the freezing process (temperature, velocity, duration, defrosting process) on the activities of the relevant enzymes
- compare relevant enzyme activities of strawberries with those of fruits of higher colour intensity and stability (e.g. elderberry, haskap, blueberry, black currant).

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 chemistry
- not have resided or carried out their main activity (work, study, etc) in Austria for more than 12 months in the three years immediately prior to 1<sup>st</sup> August 2021, 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> August 2021
- 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
- be 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 plant biochemistry and/or enzymology.



*This project has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 956257.*

**Research Fields**

Biochemistry, horticulture, enzymatics, food technology, 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> August 2021), 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. Specifics available [here](#).

**How to Apply**

Please send a letter of motivation and your full CV, along with any supporting documents, as a single PDF to Dr. Christian Molitor ([coordination.histabjuice@tuwien.ac.at](mailto:coordination.histabjuice@tuwien.ac.at)) before 17<sup>th</sup> May 2021. Please include "ESR3 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).