



UNIVERSITÀ DI PARMA

PhD Position in Food Science for MSCA-ITN “HiStabJuice” - Establishing a strong and lasting international training network for innovation in food and juice industries: a 4D-research approach for fruit juice processing” (Grant Agreement (GA) No: 956257)

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 University of Parma (SITEIA.PARMA Interdepartmental Center on Safety, Technologies and Agri-food Innovation) in Italy, with planned intersectoral and interdisciplinary stays with collaboration partners totalling a maximum of 10 months.

The research and PhD thesis will be on Development of methods and technologies for the specific inhibition of enzymes relevant for low colour stability of fruit juices and nectars.

The ESR will:

- establish methods for the inactivation of enzymes (PPO, POD, AOX, beta-Glucosidase) via thermal (traditional and ohmic heating) and non-thermal treatments (high pressure processing HPP)
- optimize assays for the determination of the enzyme activities (extraction, substrates, pH, temperature)
- produce juices and nectars and evaluate their stability during storage
- test natural and artificial enzyme inhibitors
- improve shelf life of juices and nectars by optimized technology (proteases, glucose oxidases, exclusion of oxygen)

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 Food Science (preference for: Food Science, Food Technology).
- not have resided or carried out their main activity (work, study, etc) in Italy for more than 12 months in the three years immediately prior to 1st 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 1st August 2021
- have excellent English language skills



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.

- 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 fluid foods preservation and processing, food technologies, as well as experimental work and laboratory analysis (specifically enzymatic analysis).

Research Fields

Food science, food technology, enzymatic activity, food chemistry, food microbiology.

Career Stage

According to EU HORIZON 2020 guidelines, Early Stage Researchers must have fewer than four years research experience at the date of employment (1st 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 Prof. Sara Rainieri (coordination.histabjuice@tuwien.ac.at) before 30th April 2021. Please include "ESR2 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.