



Innovation and Networks Executive Agency

PhD Position in Industrial Engineering 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 SSICA, Stazione Sperimentale per l'Industria delle Conserve Alimentari – Fondazione di Ricerca in Italy, with planned intersectoral and interdisciplinary stays with collaboration partners totalling a maximum of 11 months. PhD will be awarded by University of Parma upon successful dissertation defense.

The research and PhD thesis will be on "*Influence of thermal and non-thermal treatments on the quality of fruit juices and nectars*".

The ESR will:

- compare conventional and non-conventional stabilization methods using juice and nectars obtained from the same raw materials (frozen, same batch) and same log-reduction (5 log and 12 log)
- preserve fruit juices with HPP
- perform endogenous enzyme analysis (PPO, POD, AOX, beta-glucosidase) and their kinetics of juices and nectars
- optimize HPP protocols with respect to enzyme inactivation.

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 Industrial Engineering
- 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 01.02.2021, 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 01.02.2021
- 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 Chemistry, Food Chemistry, Food Analyses and Enzymes in food technology, Food Microbiology, Food Technologies of Fruit and Vegetable Products, Food Science and Technology, Food Engineering.

Research Fields

Chemistry, biochemistry, microbiology, food enzymes, analytical chemistry, food science and technology, food engineering.

Career Stage

According to EU HORIZON 2020 guidelines, Early Stage Researchers must have fewer than four years research experience at the date of employment (01.02.2021), 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 Currie European Training Network programs. Specifics available <u>here</u>.

How to Apply

Please send a letter of motivation and your full CV to Dr. Luca Sandei and Ms. Raffaella Pironti (coordination.histabjuice@tuwien.ac.at) before 5th December 2020. Please include "ESR8 Application" in the reference line. CVs should follow the Europass template available for free download at: <u>https://www.eea.europa.eu/about-us/jobs/application-</u> <u>documents/europass_cv_template.doc</u>.