



## **PhD Position in Industrial Engineering 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 [Catelli Food Technology](#) 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 endogenous enzymes inactivation and microorganisms reduction in selected fruit juices and nectars*”.

The ESR will:

- compare conventional and non-conventional stabilization methods using juice and nectars obtained from the raw materials
- preserve fruit juices and nectars by ohmic heating
- evaluate the effects of matrix (pH level, sugar and nutrient content) impact on enzymes and microorganisms kinetics
- optimize heat transfer equipment for the thermal processing of liquid foods
- optimize ohmic heating treatment and benchmarking between ohmic and indirect technologies

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 scientific / technological discipline that makes them eligible for a PhD in Industrial Engineering (preference for: Industrial Engineering, Food Engineering, Food Technology, Microbiology and Chemistry).
- 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 01.08.2021, 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 01.08.2021
- have excellent English language skills, Italian and French language knowledge will be considered as a plus
- 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 heat transfer in food processing, food technologies, as well as experimental work and laboratory analysis (specifically enzymatic and microbiological analysis).

### **Research Fields**

Heat transfer, food engineering, food technology, chemistry, biochemistry, microbiology, enzymatic, 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 (01.08.2021) 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.

### **How to Apply**

Please send a letter of motivation and your full CV to Dr. Mario Gozzi (coordination.histabjuice@tuwien.ac.at) before 31<sup>st</sup> January 2020. Please include "ESR6 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).