

ERASMUS+ STUDENT INTERNSHIP: Lab Research in Viticulture & Oenology

The Agricultural Institute of Slovenia is the leading research organisation in agricultural science in Slovenia. We are looking for a highly motivated, full-time Erasmus+ Master student for a 4 to 6-month internship in the Department of Fruit Growing, Viticulture and Oenology, with the possibility of extension. We are flexible on the start date; however, it should preferably start in spring 2025.

The intern will work in the field of analytical chemistry focusing on grape and wine primary and secondary metabolites.

Overview

The Erasmus+ student will work alongside experienced scientists and researchers and will learn new laboratory techniques, and contribute to ongoing projects. The student will collaborate in:

- Establishment of experiments and design setup.
- Sample preparation: Trainee will be familiarized with different sample preparation techniques, i.e. sample handling with liquid nitrogen, lyophilisation and derivatization, SPE extractions ...
- Wine Analysis: Trainee will work with different gas chromatography (GC) techniques, focusing on analyzing wine aromas (terpenes, esters, C6 compounds, thiols, low molecular weight sulphur compounds using SPME; HS and liquid injection techniques. Trainee will be also involved in polyphenol analyses and other wine analyses (sulfur, acids, ethanol content...).
- Grape analyses: Trainee will work with different targeted and untargeted analytical methods for determination of primary metabolites, terpenes, sesquiterpenes, C6 compounds, polyphenols and others in grape and leaf tissues from various field and greenhouse experiments using GC-MS/MS and LC-MS/MS techniques.
- Data analyses: multivariate data analyses in R.

The internship is designed to provide experience in:

- Hands-on laboratory experience with high-end analytical equipment such as GC-MS/MS, GC-FID/SCD, LC-MS/MS.
- Working with various wines from different terroirs of Slovenia.
- Handling vine tissues (grapes, leaves, roots) from various field experiments, including water stress, temperature stress, maturation, and rootstock experiments.



Qualifications and Experience

The applicant should have a minimal background in Analytical Chemistry, Food Science and Agronomy. Candidates with laboratory work experience will be positively evaluated.

Work Environment

The research work will be carried out at the Agricultural Institute of Slovenia, which is located in the centre of Ljubljana (capital of Slovenia). The intern will be directly supervised and trained by the project's sole researcher and will also have access to high-quality research equipment (GC-MS/MS; GC-SCD/FID; LC-MS/MS...). This internship provides a comprehensive learning experience in the field of wine and grape analysis and provides valuable skills and knowledge for the intern's final thesis.

Compensation

- This is an unpaid internship opportunity.

More information

- Contact person: Katja Šuklje Antalick (Katja.SukljeAntalick@kis.si)
- [Website of the Department of Fruit Growing, Viticulture and Oenology](#)

