PROTEOMICS AND METABOLOMICS IN THE AGRO-FOOD CHAIN

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Course Aims

The aim of this course is to provide knowledge about fundamental principles, approaches and workflows of metabolomics and proteomic technologies and their principal applications in the agro-food chain.

Methodology

Introduction to metabolomics and proteomics followed by a discussion of real examples from food science & plant science area.

Course Description

- Introduction to metabolomics (definitions & base concepts, analytical workflow, data analysis).
- Introduction to proteomics (definitions & base concepts, analytical workflow, data analysis).
- The importance of chemometrics and multivariate statistics in omics-science.
- Untargeted profiling-based approaches: applications of metabolomics and proteomics in food & feed traceability, food quality, plant science, food technology and food processing.
- Cases of study from food science & plant science.