



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

VP32\_DIP\_STF

## **Visiting Professor Program Academic year 2020/2021**

**DEPARTMENT OF DRUG SCIENCE AND TECHNOLOGY**

**TEACHING COMMITMENT: 16 hours**

**COURSE TITLE**

**Advances in Food Analysis**

**TEACHING PERIOD**

1st term

**SCIENTIFIC AREA**

Food Chemistry and Analysis

**LANGUAGE USED TO TEACH**

English

**COURSE SUMMARY**

The course is presenting innovative analytical approaches adopted to characterize, at the molecular level, food functional and nutritional properties. Analytical platforms including chromatography and mass spectrometry (high and low resolution mass spectrometry) are introduced and their features discussed by practical examples focused on: aroma compounds in food (sensomic approach), vegetal food (herbal teas, nuts etc..) and beverages. Sample preparation is also mentioned to highlight the role of automation and integration of this fundamental step to the entire analytical process.

**LEARNING OBJECTIVES**

Understand the most informative analytical approaches (conventional and innovative) nowadays adopted in research, quality and safety control activities. Understand the role of different analytical dimensions (separation, detection, sampling) for accurate and in-depth chemical characterization of complex food fractions. Understand the fundamental role of Mass Spectrometry in food safety control and quality assessment.

### **TUTORSHIP ACTIVITIES (IF APPLICABLE)**

### **LAB ACTIVITIES (IF APPLICABLE)**

### **OTHER ACTIVITIES (IF APPLICABLE)**

Seminars and conferences to PhD and research fellows.

### **VISITING PROFESSOR PROFILE DESCRIPTION**

The Candidate should have teaching duties in his/her University that comply with the call: i.e, Food Chemistry, Food Analysis, Analytical Chemistry applied to Food. A scientific curriculum documenting high level and active research in the field with adequate coverage of the proposed topics (sensomics, foodomics, lipidomics, food contaminants control etc..) is mandatory. International collaboration with highly reputed institutions as well as experiences in research in different countries would be also relevant.

### **CONTACT PERSON AT THE DEPARTMENT**

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