



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Advanced techniques for sample preparation

2223-94R-SCGA16

---

#### Title

Advanced techniques for sample preparation

#### Teacher(s)

Fabio Gosetti ; Veronica Termopoli

#### Language

English

#### Short description

Sample preparation is an integral and fundamental step of the analytical process. The appropriate use of the sample preparation techniques contributes to the success of the analysis, both in terms of the quality of the result and in terms of time and cost optimization of the whole process. Nowadays, beside traditional methods, innovative technologies for sample preparation in the framework of quality control and method development are available. They allow the reduction of time and consumption of solvents, and often the improvement of performance in terms of accuracy and robustness of the method.

The course will introduce principles and theory of the main sample preparation techniques for the extraction of organic species from aqueous and solid matrices, necessary before the final analytical determination, mainly carried out with chromatographic techniques. Particular attention is paid to innovative techniques and online systems, which

aim to reduce analysis times, sample manipulation (decreasing the risk of analyte losses) and solvent consumption.

Evaluation: NO

### **CFU / Hours**

2 CFU - 16 Hours (Lecture)

### **Teaching period**

II semester

---