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 termsof the quality of the result and in termsof time and cost optimization of the whole process. Nowadays, beside traditionalmethods, innovative technologiesfor sample preparation in the frameworkof quality control and method development are available. They allow the reduction oftime and consumption of solvents, and often the improvement of performance in terms of accuracy and robustness of the method.

The course will introduce principlesand theory of the main sample preparation techniquesforthe extraction of organic speciesfrom aqueous and solid matrices, necessary before the final analytical determination, mainly carried out with chromatographic techniques. Particular attention ispaid to innovative techniquesand online systems, which

aimto reduce analysistimes, sample manipulation (decreasing the riskof analyte losses) and solvent consumption.

Evaluation: NO

CFU / Hours

2 CFU - 16 Hours (Lecture)

Teaching period

II semester