BIR1318 Organic analysis I : separation techniques

[30h+60h exercises] 5.5 credits

This course is taught in the 2nd semester

Teacher(s): Sonia Collin, Jacqueline Marchand
Language: French
Level: First cycle

Aims

Acquiring knowledge, know-how and experimental practice of separation techniques and analytical methods (HSE, critical thinking, team work).

Main themes

Principles and practice of analytical chromatography
- basics and beyond
- contribution to organic analyses
- gas chromatography
- HPLC chromatography

Content and teaching methods

1. Introduction to extraction and separation techniques & qualitative and quantitative analysis.
2. Theoretical aspects : - Extraction : solubility, miscibility, lipophilicity, extraction procedures (6h) - Derivatisation techniques to improve extraction and analysis (4h30) - Main concepts in chomatography (2h) - Gas chromatography (GC, GC^2) and high pressure liquid chromatography (HPLC) (8h) - Separation techniques of chiral compounds

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

- background : CHIM 1170 ....
- appraisal : exam
- individual homework including preparation and oral presentation of an analytical protocol
- optionalities : single course attendance or combined with seminars

Programmes in which this activity is taught

BIR2	Bio-ingénieur

Other credits in programs

BIR21/C	Première année du programme conduisant au grade de bio-ingénieur (Chimie)	(5.5 credits)	Mandatory