

## Structural chemistry

# Introducing

I2BEBS10 Biochemistry  
I2BEAN20 Analysis methods

## Description

Training at spectroscopic methods applied to a rational approach of the structural determinations in deepening and broadening the theoretical basis of Nuclear Magnetic Resonance, Infra Red spectroscopy Ultra Violet and the Mass Spectrometry. Use of the complementarity of these different techniques for the determination of structure of molecules.

Principle and application of analytical methods, (NMR, MS, IR, UV) in Chemistry/Biochemistry. Spectroscopy NMR 1D and 2D: <sup>1</sup>H, <sup>13</sup>C. Mass spectrometry: EI, CI, Electrospray, MALDI, SIMS, ... .

## Évaluation

L'évaluation des acquis d'apprentissage est réalisée en continu tout le long du semestre. En fonction des enseignements, elle peut prendre différentes formes : examen écrit, oral, compte-rendu, rapport écrit, évaluation par les pairs...

## Practical info

## Location(s)

 Toulouse

## Objectives

At the end of this module, the student will have understood and be able to explain (main concepts):

- the theory and practice of the main analytical techniques used in chemistry and biochemistry.

The student must be able to:

- solving structure of chemical compounds and simple biochemistry molecule using analytical methods: NMR, Mass Spectrometry, IR, UV.

## Necessary prerequisites

I1ANETCH Chemistry  
I2BECH10 Organic chemistry