

[22.5h] 2.5 credits

This course is taught in the 1st semester

Teacher(s): Patrick Bertrand, Yann Garcia (coord.)
Language: french
Level: 2nd cycle course

Aims

This analytical chemistry course gives a general introduction to the main instrumental methods. The emphasis is put on the principles, application ranges, possibilities and limitations of each techniques. The formation should allow the student to direct an analysis towards the most appropriate solutions but does not correspond to a specialisation in the fields covered by this course.

Main themes

- Thermal analysis: thermogravimetric analysis (TGA), thermodifferential analysis (TDA), differential scanning calorimetry (DSC)
- Surface techniques: surface analysis (XPS, SIMS, BET) and microscopies (SEM, TEM, AFM, #)
- Mössbauer spectroscopy
- Magnetochemistry techniques: EPR, Faraday method, SQUID

Other credits in programs

CHIM22	Deuxième licence en sciences chimiques	(2.5 credits)
ESP3DS/TI	Diplôme d'études spécialisées en santé publique (santé au travail - toxicologie industrielle)	