



CHIM2383 Enzymology and biotechnology II

[22.5h+0h exercises] 2.5 credits

This course is taught in the 2nd semester

Teacher(s): Patrice Soumillion
Language: French
Level: Second cycle

Aims

The second part will take care in more depth of the methods of investigation, covering the regulation of enzymatic activity and applications of enzymes in different domains.

Main themes

Second Part: 1. Methods of investigation: a. kinetic methods (rapid kinetics, perturbations and relaxation). b. chemical modification and analysis of the active site. c. mutagenesis techniques and protein engineering. 2. Allosteric regulation: a. protein-ligand interactions (thermodynamic aspects) b. models describing allosteric regulation c. case studies. 3. Enzymatic catalysis and its applications: a. stabilization and immobilization of enzymes b. industrial applications of enzymes c. applications of enzymes in clinical biology d. applications of enzymes in organic synthesis. 4. Multienzyme complexes.

Other credits in programs

CHIM22 Deuxième licence en sciences chimiques (2.5 credits)