



Faculté de médecine

MD

FARM2110 Chimie pharmaceutique inorganique

[30h] 3 credits

This course is taught in the 1st and 2nd semester

Teacher(s): Bernard Gallez
Language: french
Level: 2nd cycle course

Aims

The aim of this lecture is to introduce the field of inorganic chemistry. Particularly, the lecture will give the fundamentals notions to understand the use of radiolabelled compounds and metal complexes in pharmaceutical and biomedical field.

Main themes

Several aspects of inorganic pharmaceutical chemistry will be covered with a special emphasis in toxicology, therapeutics and diagnostics.

Content and teaching methods

Radionuclides in pharmacy and medicine : elements of nuclear physics, radioactive decays, interactions with the matter, detection of radiations, radiobiology, radiotoxicology, preparation of radioisotopes for biomedical use, in vitro applications (RIA), in vivo applications (nuclear medicine), and comparison with other imaging modalities
Metal complexes in pharmacy and medicine : description of the interaction metal-ligand, diagnostic applications (contrast agents), therapeutic applications (anti-cancer, anti-acids, anti-bacterial activities, mineral supplements), toxicity of metals (lead, mercury, cadmium, manganese) and chelation therapies, elements of bioinorganic chemistry

Other credits in programs

FARM21	Première année du grade de pharmacien	(3 credits)	Mandatory
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