UE Biomaterials

ECTS
6 credits

Component
UFR Chimie-Biologie

- **Teaching language(s):** English
- **Open to exchange students:** Yes

Presentation

Description

In this lecture, students learn polymeric materials for the applications in the medical field, especially their macromolecular structure and organization as well as structure-function relationships. The main families of synthetic and natural polymer materials used in living tissues and/or biological fluids are presented. Emphasis is placed on the properties and characterization of stimuli-responsive polymers and hydrogels that can sense specific biological signals and trigger a therapeutic action appropriate to local pathological or physiological environments. The course will be illustrated with applications in the field of controlled drug release and tissue engineering.

Objectives

Skills:

Knowledge of stimuli-responsive polymers and biopolymers and their use for the design of biomaterials for biomedical applications.

Course parts

UE Biomaterials - CM	Lectures (CM)	15h
UE Biomaterials - TD	Tutorials (TD)	9h

Period : Semester 9

Useful info

Contacts

Program director

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Place

Grenoble

Campus

Grenoble - University campus