UE Biomaterials

Niveau d'étude
Bac +5

ECTS
3 crédits

Composante
UFR Chimie-Biologie

Période de l'année
Toute l'année

- **Langue(s) d'enseignement:** Français
- **Ouvert aux étudiants en échange:** Oui
- **Code d'export Apogée:** YAX9CH40

Présentation

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.

Objectifs

Skills:

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

Heures d'enseignement

UE Biomaterials - TD	TD	9h
UE Biomaterials - CM	CM	15h

Pré-requis recommandés

Prerequisites:

Polymers 1 (M1 Master Program)

Période : Semestre 9

Infos pratiques

Contacts

Responsable pédagogique

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Lieu(x) ville

Grenoble

Campus

Grenoble - Domaine universitaire