

# Chimie physique macroscopique: de l'auto-assemblage à l'auto-organisation

CHIM-F408 | 2024-2025

## Lecturers

Anne DE WIT (Coordinator) and Laurence RONGY

## Course mnemonic

CHIM-F408

## ECTS credits

5 credits

## Language(s) of instruction

French

## Course period

First term

## Teaching method and learning activities

Lessons in front of a class room

## Other information

### Contact(s)

A. De Wit, local 205-112, bâtiment NO; Campus Plaine ULB, tél 02 650 5774; Email: adewit@ulb.ac.be

## Evaluation method(s)

Oral examination

## Evaluation method(s) (additional information)

Oral examination

## Programmes

### Programmes proposing this course at the faculty of Sciences

MA-CHIM | **Master in Chemistry** | finalité Research/unit 1, finalité Teaching/unit 1, finalité Teaching/unit 2 and finalité Professional/unit 1

## Course content

Chapter I: Macroscopic description of chemical dynamics, Linear thermodynamics of non equilibrium systems Chapter II: Microscopic aspect of transport coefficients Chapter III: Phase transitions, Landau theory of second order phase transitions Chapter IV: Out of equilibrium nonlinear dynamics

## Objectives (and/or specific learning outcomes)

Understand the wealth of dynamics that can be obtained in physico-chemical systems maintained out of equilibrium