

Electrochimie : Concepts, Techniques et Applications

Lecturers

Thomas DONEUX (Coordinator) and Jon USTARROZ TROYANO

Course mnemonic

CHIM-F415

ECTS credits

5 credits

Language(s) of instruction

English and French

Course period

Second term

Course content

Thermodynamic aspects of the electrode-solution interface : structure of the double layer, concept of potential and pzc, role of the nature and structure of the electrode. Adsorption phenomena : thermodynamics and kinetics of the adsorption, formation of condensed monolayers. Nucleation and growth mechanisms. Redox processes and electrochemical kinetics. Electrochemical methods for the study of adsorption and electrochemical processes.

Objectives (and/or specific learning outcomes)

Study of the electrode-solution interface from physico-chemical concepts.

Teaching method and learning activities

Lectures

Other information

Contact(s)

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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 and finalité Professional/unit 1