MASTER BIOTECHNOLOGIES

PARCOURS MASTER INTERNATIONAL EN BIOTECHNOLOGIES MARINES

semestre 9

OPTIONS (1 AU CHOIX)

Microalgae and biorafinery

Présentation

Cette UE sera mutualisée avec l'Université de Nantes ; la fiche UE est en cours d'élaboration

3 crédits ECTS

Volume horaire

Cours Magistral : 22h
Travaux Dirigés : 8h
Travaux Pratiques : 10h

Objectifs

To know the available techniques, to understand their main engineering aspects and to be able to propose a process scheme for a microalgae metabolite valorization.

Descriptif

Fundamentals of main unit operations encountered in microalgae harvesting, cells disruption and metabolites extraction will be presented. This comprises centrifugation, membrane concentration or fractionation, high pressure or bead milling cell disruption and solvent extraction.

Students will have to manage in small group a biorafinery practical case from the photobioreactor to the fraction of interest.