UCL Faculté des sciences appliquées

FSA

MAPR2680 Treatments of gaseous wastes

[30h+7.5h exercises] 4 credits

This course is taught in the 1st semester

Teacher(s): Jacques Devaux, Olivier Françoisse
Language: french
Level: 2nd cycle course

Aims

Treatment of industrial gas effluents towards clean disposal and/or energetic valorisation by recycling

Main themes

A first part of the course concerns atmospheric parameters and data in use in air pollution (Definitions and data in envionmental chemistry, atmosphere, pollution). In a second chapter, general information about atmopheric pollutants are given (ubiquitous compounds, lifetime, sources-sinks, interior air, photochemical reactions, OH° radicals). A third chapter follows giving a systemic presentation of main atmospheric pollutants.
In a second part, technical means oftreatemnt and/or abatment are envisaged in separate chapters devoted to dust, acid gases, nitrogen oxides, heavy metals, VOC's, and odour control.

Content and teaching methods

Scientific & technological information are given by ex cathedra courses, while practical cases are treated by personal and team works.

Other credits in programs

BIR22/4C	Deuxième année du programme conduisant au grade de bio-ingénieur : Chimie et bio-industries (Technologies environnementales: eau, sol, air)	(4 credits)	Mandatory
BIR22/4E	Deuxième année du programme conduisant au grade de bio-ingénieur : Sciences et technologie de l'environnement (Technologies environnementales: eau, sol, air)	(4 credits)	Mandatory
ENVI3DS/1	Diplôme d'études spécialisées en science et gestion de l'environnement (Industrie et environnement)	(4 credits)	Mandatory
GC22	Deuxième année du programme conduisant au grade d'ingénieur civil des constructions	(4 credits)	
INCH23	Troisième année du programme conduisant au grade d'ingénieur civil chimiste	(4 credits)	Mandatory