

**E-044**

▲ Who should attend?

Global approach to understand carbon capture and storage (CCS).  
For operators, regulators, policy makers and any person interested in reduced CO<sub>2</sub> emission. To introduce them the CCS challenges when focusing gas emission reduction. An engineering background is advised for days 2 and 3.

▲ Duration

**2 days**

▲ Sessions in English

**November 04-05, 2010**  
Rueil-Malmaison (Paris)

**French sessions: F-044**

▲ Registration

Fees: € 1,300

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▲ Course Coordinator

**Bernard MICHAUT**

Ref. **ENV / CO2-3A**

# CO<sub>2</sub> - GEOLOGICAL STORAGE: SITE SELECTION & CHARACTERIZATION

## OBJECTIVES

The main of this training course is to deliver general information on carbon capture and storage and to present the technical options, tools and associated challenges to be considered in such an approach.

## COURSE CONTENT

### CHALLENGES, REGULATION AND ECONOMY OF CO<sub>2</sub> 1 day

Contribution and asset of the CCS (carbon capture and storage) to fight against climate warming  
Technical diagrams and international and local lawful context: with which expires?  
Technical and technological challenges: what is CO<sub>2</sub> in this context?  
Economical aspects for a short-term solution

### CAPTURES TECHNIQUES AND TRANSPORT OPTIONS 1 day

Principal technologies for collecting CO<sub>2</sub>:  
- post-combustion,  
- oxy-combustion,  
- pre-combustion.  
CO<sub>2</sub> and impurities: which consequences?  
Conditioning and transport of CO<sub>2</sub>

### CO<sub>2</sub> STORAGE: AN INTEGRATED MULTISCALE GÉOSCIENCE APPROACH (WHAT IT DEALS WITH?) 1 day

Selection and characterization of an underground storage reservoir  
Contribution of physical and numerical models to the validation of the site in term of storage capacity, performance and integrity at short and long terms  
Considering coupled phenomena, hydro-geomechanical and geochemical modeling's to predict reservoir fill-up and CO<sub>2</sub> trapping  
Site exploitation and monitoring: mapping CO<sub>2</sub> migration and trapping until long term abandonment after storage capacities being reached (validation and updating of predicted storage scenarios by using in situ observations)