

Hydrogen storage



Component
École Nationale
Supérieure
d'Électrotechnique
d'Électronique

In brief

- **Ametys Code:** M4R9Y408
- **Open to exchange students:** Yes

Presentation

Objectives

- Understand the different technologies used for hydrogen storage
- Understand the advantages and disadvantages of each storage technology
- Understand the risks associated with hydrogen and the storage method used
- Understand which storage technology to use depending on the intended application

Description

- Introduction and basic concepts (review)
- Hydrogen storage in gaseous form
- Hydrogen storage in liquid form (LH2)
- Solid hydrogen storage by absorption (Hydrides)
- Solid hydrogen storage by adsorption (Adsorbents)
- Hydrogen storage in organic liquids (LOHC)

- Hydrogen storage underground
- Risks associated with hydrogen
- Introduction to research (disruptive technologies)