Fuel cells and hydrogen applications

Component
École Nationale Supérieure d'Électrotechnique d'Électronique

In brief

- **Ametys Code:** M4R9Y460
- **Open to exchange students:** Yes

Presentation

Objectives

Fuel Cell Technologies

Characterization by V(I) Polarization and Impedance Spectroscopy

Small-Signal and Large-Signal Modeling of Fuel Cells

Transportation and Stationary Applications

Description

The research and development department focuses on fuel cells and consists of: Evaluating two complementary experimental characterization methodologies: - Dynamic plotting of voltage-current curves. - Impedance spectroscopy. Parameterizing a dynamic model of the PEM fuel cell based on these experimental characterizations. Evaluating the dynamic behavior of the PEM fuel cell in response to disturbances generated by the connection of static converters.