

**Name of the organization**

European Commission DG-JRC, Institute for Energy and Transport

**Name of the infrastructure / laboratory**

Hydrogen production Performance characterization Facility (H2PF)

**Address and country of the infrastructure / laboratory**

Westerduinweg 3, 1755 LE Petten, The Netherlands

**Person responsible of the access / Contact person: T Malkow****Phone / Fax / Web / Email**

+31 224 565656 / +31 224 565625 / <http://iet.jrc.ec.europa.eu> / [Thomas.malkow@jrc.nl](mailto:Thomas.malkow@jrc.nl)

**Main field of activity of the infrastructure / laboratory**

- ▶ Stationary and Fuel Cells for Power and Heat Generation
- ▶ Transportation and Refueling Infrastructure
- ▶ Cross-cutting issues

**Short description of the infrastructure / laboratory**

The Hydrogen production Performance characterization Facility (H2PF) comprises of a small scale hydrogen production unit (reformer) based on reforming of low calorific natural gas to high purity hydrogen as fuel cell feed and an online monitoring of reformer input and output fluid and energy streams to survey quality of feeds and products and to determine performance in terms of efficiency and CO<sub>2</sub> emissions under various operation modes. So far, very little research is ongoing to support the definition of test protocols and their experimental validation on the energy conversion and environmental performance of small scale reformers.

**Main research area(s) of the infrastructure / laboratory**

reformer testing; hydrogen production