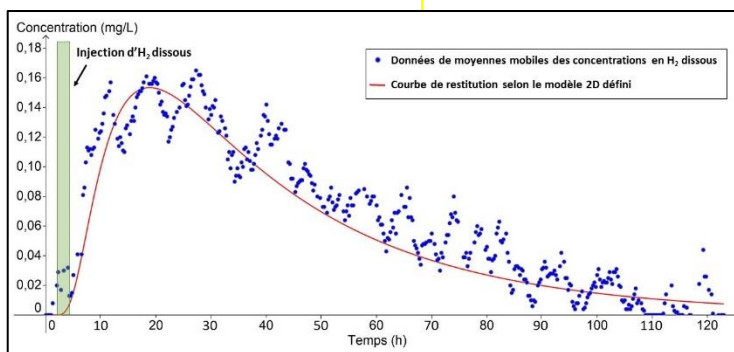
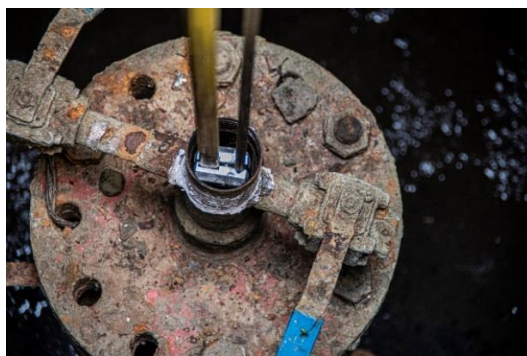


# SysMoG<sup>®</sup> : Gas Monitoring System

SysMoG<sup>®</sup> is a probe for automatic and continuous measurement of gases in the subsurface. The dissolved gases in groundwater can be detected in-situ with SysMoG<sup>®</sup> probes in boreholes. SysMoG<sup>®</sup> probes can be configured for different applications. SysMoG<sup>®</sup> probes consist of a gas chamber, a measurement module integrated in the probe or connected at the surface with gas circulation lines and a data acquisition system connected to the mobile network. SysMoG<sup>®</sup> probes can be equipped with different sensors depending on which gases are to be measured.



Application examples: Regalar project: gas monitoring in wells up to 1200 m depth. Project Rostock: Monitoring of dissolved hydrogen injection in aquifers.

## Specifications

- Pressure range : up to 100 bar hydrostatic pressure.
- Gases measured : CO<sub>2</sub>, CH<sub>4</sub>, O<sub>2</sub>, H<sub>2</sub>, N<sub>2</sub> (other gases on request)
- Temperature range : 5°C - 85°C
- Dimensions : according to applications

## Types of probes:

- SysMoG<sup>®</sup> MD: Surface probe in combination with circulation modules. Applications are mainly experiments in subsurface laboratories.
- SysMoG<sup>®</sup> MP: Probe for multipacker systems for gas measurement in isolated measurement intervals in boreholes
- SysMoG<sup>®</sup> HP: Measuring probe for deep wells. The probe is inserted into the borehole on a winch. OD 54 mm, length 3 m. The probe is equipped with sensors for pressure, temperature and electrical conductivity measurements.
- SysMoG<sup>®</sup> H2: Special probe for hydrogen measurement in shallow boreholes. OD 69 mm, length 1 m. The H<sub>2</sub> sensor and the data acquisition and transmission system are integrated in the probe.