



Written on 21 October 2024





**Events** 

**IFPEN** 

Hydrogen



## 28 - 29 November 2024

Dates: November 28-29, 2024

Location: Rueil-Malmaison, outskirts of Paris, France

# Registration

#### **About the Workshop**

The SURF'HY workshop will gather experts to discuss the latest advancements in natural hydrogen exploration. As over 40 companies and more than a dozen wells worldwide engage in this emerging field, the exploration of natural hydrogen resources is rapidly gaining momentum. While still a nascent area, the development of concepts for hydrogen-generating geological systems has progressed, enabling the identification of prospective exploration sites.

### The role of surface technologies

A critical aspect of advancing hydrogen exploration involves collecting data to confirm the presence of subsurface hydrogen systems. Techniques such as surface seep identification, a method once pivotal in early petroleum exploration, are now being adapted for hydrogen detection. Increasingly, research teams are undertaking soil gas sampling to search for natural hydrogen.

However, detecting hydrogen gas concentrations alone presents challenges due to various potential sources of hydrogen in soils. To address these complexities, additional geochemical parameters—such as the molecular and isotopic compositions of gases—are being considered to better understand hydrogen origins and their connection to subsurface resources. Furthermore, studies in water chemistry, soil microbiology, and remote sensing are being integrated to enhance exploration efforts.

#### **Workshop Objectives**

The workshop aims to bring together specialists in geology, geochemistry, microbiology, analytical chemistry, and remote sensing. Discussions will focus on overcoming challenges and leveraging opportunities for the development of surface technologies in natural hydrogen exploration. The goal is to establish recommendations for best practices and set research priorities that will advance this promising low-carbon energy source.

SURF'HY Workshop: advanced natural hydrogen exploration through surface technologies 21 October 2024

Link to the web page: