

ORIGAMI

ORIGIN of GAs and Migration



The ORIGAMI Chair aims to study different aspects of the sub-surface fluid systems (water, liquid HC and gases, but also CO₂ and H₂) from their source to their storage. A specific aspect of the research topics will be to study fluid interactions and migration processes.

In this regard, noble gases are powerful physical tracers to study physical processes, as they are chemically inert and are not affected by any biological activity. Moreover, their low concentration gives them a simplified thermodynamic behaviour (whether in a steady-state or unsteady-state) which carry the fingerprint of physical processes occurring during fluid transfers through the crust.

A supplementary important aspect of the project will concern the set-up of a noble gas laboratory, with state of the art facilities and an in-house designed extraction / purification line, dedicated to natural fluid purification.

The research will benefit from a strong partnership between TotalEnergies and the LFCR.



Anne Battani passed her Ph.D from the Université de Paris Sud-Orsay in 1999, and her Habilitation from UPPA in 2020. In the last two decades she worked at IFPEN, ANDRA and SUERC (Glasgow) as an expert in noble gas geochemistry. She joined the UPPA in November 2020.