

## Hydrocarbon metabolism in Archaea

### Project description:

In this project we will **study microbial key players in subsurface environments** – members of the domain Archaea that **can consume methane or other natural oil and gas constituents under anoxic conditions**. Many of those taxa cooperate with sulfate-reducing bacteria to carry out hydrocarbon degradation. The successful applicant gets to work with natural enrichments of these enigmatic microbes and can apply a variety of molecular methods and biogeochemical approaches to identify relevant environmental processes in microbial hydrocarbon metabolism. There are several novel biomolecules to discover that are produced exclusively by this group of microorganisms.

### Keywords:

Anaerobic oxidation of methane, carbon metabolism, alkanes, methanogenesis, Archaea

### Entry requirements:

The applicants needs a **MSc. degree (or equivalent) in biological sciences or related fields**. Skills and interests in microbiology, molecular biology/bioinformatics and biochemistry are important. The applicant should be willing to join ship-based research expeditions and work in an interdisciplinary team at MPI Bremen and partner institutions.

**Location:** Max Planck Institute for Marine Microbiology

**Starting date:** September 2021

**Funding:** limited to 3 years

### How to apply:

Apply until **March 31<sup>st</sup>, 2021** via the [HFA application portal](#).

The Hector Fellows will arrange interviews (via skype or if feasible in-person) with the most promising applicants. The final candidates will be invited for a personal presentation on July 8, 2021 in Bremen (Germany). The final decisions will be announced by August 2021.

For questions related to making your application, please contact Hector Fellow Academy Office: [application@hector-fellow-academy.de](mailto:application@hector-fellow-academy.de) or [www.hector-fellow-academy.de](http://www.hector-fellow-academy.de)