



Antje Boetius

Max Planck Institute for Marine Microbiology

Group Leader of Microbial Habitat Group

Professor of Microbiology
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Professional work / Scientific specialty

The microbial habitat describes the physical location and type of environment in which a population of microorganisms lives. Hence, my research group studies the physical, chemical, geological hydrological and biological characteristics of diverse microbial habitats. The goal of our research on "microbial habitats" is to understand niche formation and to investigate regulatory mechanisms for the occurrence and distribution of microbial populations. This requires the development of a variety of *in situ* techniques, as well as experimental strategies to quantify the nature and variability of the habitat on different temporal and spatial scales. One of our main interests is microbial life in extreme environments such as mud volcanoes, hot vents and gas hydrates.

Work on board

My main tasks will have to do with biogeochemistry and microbial ecology of the mud volcanoes, pockmarks and brine seepage in the Nile fan area. During the preceding cruise Bionil in november 2006, we have identified many interesting seep habitats, so I look forward to seeing them again during the ROV *Victor 6000* dives and to investigate temporal change. Also, we have deployed a lot of colonization experiments in the framework of the GdRE DiWood and the ESF EuroCores EuroDeep project Chemeco, and these will be subsampled during Medeco. Furthermore, I will bring our *in situ* incubators to measure the microbial methane consumption.

Professional CV

Prof. Dr. Antje Boetius studied Biological Oceanography at the University of Hamburg and at Scripps Institution of Oceanography. She received her PhD in 1996 from the University of Bremen for her work in deep-water polar ecology. Her Post Doc at the Baltic Sea Research Institute was concerned with patterns of organic matter flux and turnover in the Indian Ocean. Today, she is leader of the group “Microbial habitats” in the department of Biogeochemistry of the MPI and Associate Professor of Microbiology at Jacobs University Bremen. Antje Boetius’ research focuses on cold seep ecosystems, on the methane turnover in marine sediments and on deep-sea microbial ecology.

Currently, main working areas are the Eastern Mediterranean Sea, the Norwegian margin, and the Black Sea. Antje Boetius is a coordinator and collaborator in many national and international research programs on gas hydrates, deep-sea ecology and technology, and she participated in over 20 research expeditions.

Passions outside the work

Good food, good wine, good company, good music, fashion and global city life (not necessarily in that order)