

## **Temporal evolution of hydrothermal systems at the Mid-Atlantic Ridge**

Responsible: Jan C. Scholten and P. Stoffers, Institut für Geowissenschaften, Universität Kiel, A. Eisenhauer, IFM-Geomar

Little information is available on the life-span of hydrothermal systems, their temporal variability or changes of the chemistry of hydrothermal solutions with time. Based on age determinations of hydrothermal deposits by means of natural radionuclides, the duration and periodicity of hydrothermal activity shall be investigated in the Logatchev field. Based on the geochemistry and the ages of the hydrothermal deposits information on the variability of the hydrothermal fluids during the geological past will be obtained. These studies are based on drill cores which will be obtained during RS MERIAN (2006) cruise. Age dating of the hydrothermal deposits recovered by these cores will allow to investigate the evolution of the Logatchev Field in space and time.