

MARUM / GLOMAR Expert Course:

Geology and Geophysics of the Arctic Region

Prof. Dr. Wilfried Jokat

Alfred Wegener Institute for Polar and Marine Research, Bremerhaven

14-16 March 2012, MARUM, Bremen

Objectives

In the current debate on Arctic legal issues and resources it is obvious that details about the geological history, which play an important role for these issues, are either not known or not transferred to the public. Thus, political and/or scientific conclusions based on the present day situation only, are mostly biased or even wrong, since the geoscientific knowledge about these areas are not taken into account.

This course will introduce the participants on the present day geological and geophysical knowledge of the Arctic region. Furthermore, the course will show the difficulties in conducting geophysical measurements in pack ice, and the limitation of the data interpretation. The political status of the Arctic will be introduced and discussed in view of the present day discussions on resources and environmental issues.

Practical exercises will focus on seismic data analyses/interpretation to provide you with some experience to judge yourself on published results.

Topics

- Introduction into the topography of the Arctic Ocean and the geology of the surrounding continents
- Geophysical methods in ice covered areas: New technologies and limitations
- Politics and geoscience in the Arctic: Who owns the Arctic?
- Interpretation of seismic wide-angle data gathered in the Arctic Ocean and their correlation with seismic reflection data
- Video material will be presented to make the participants familiar with the environment. A visit of the Alfred Wegener Institute can be organized depending on the interest of the participants

Location

MARUM, University of Bremen, 28359 Bremen, Germany, Room 2060

Course schedule

14 March 2012 – 14.00-17.00

15+16 March 2012 - Morning (9.00-12.30) and afternoon (13.30-17.00) sessions (alternating lectures and exercises).

To subscribe

Please send a mail to Christina Klose (glomar-courses@marum.de). Please give your name, status (PhD student, Postdoc or Master Student), institute / university and research area / working group as well as your field of study.