



Geosciences Working Group 2010

The Geosciences Working Group of the Faculty 5 of the University of Bremen offers an approach to geology, palaeontology and mineralogy to the public at on each second Thursday of the month 7 pm. These meetings allow to discuss with each other and to get advice from a scientist. Beginners will benefit from getting an easy access to geosciences. These meetings include a generally comprehensible talk on geoscientific topics. Further information can be found on our homepage: www.geosammlung.uni-bremen.de

14th January 2010

Lecturer: Dr. Christian Scheibner, Bremen **Topic:** Expeditions to Spitzbergen – geology and daily business in high latitudes **Media:** Cinema show with face-to-face comments



The Norwegian islands of Spitzbergen are located in the North Atlantic and Arctic Ocean. Our guest comments on parts of a couple of movies that were filmed during planning and accomplishment of geological expeditions to this archipelago. The topics covered range from building up the camp and protection of the tam from polar bear attacks, to the observation of today's debris flows illustrating geological processes otherwise recorded in the sediments only. Last but not least the geological history is treated, the focus will be on limestones of the Permian and Carboniferous period as well as their fossil record.

11th February 2010

Lecturer: Dr. Torsten Bickert, Bremen

Topic: The "Lange Anna" rock formation and the storm tides – History and perspectives of the Isle of Heligoland from the viewpoint of geosciences **Media:** Power Point



The Isle of Heligoland is the only German offshore island, a popular destination for young and old as well as the last paradise of duty-free shopping. How became this red rock part of the sea? What is he telling about his history? How long will the "Lange Anna" rock formation survive? This talk gives an introduction to the geology of the Isle of Heligoland in the framework of the northwest-European depositional realm and is discussing the acute danger of the island and possible safety precautions to preserve it.

11th March 2010

Lecturer: Dieter von Bargen, Ottersberg **Topic:** Fossil sponges from the Cretaceous of Hannover (part 1) **Media:** Power Point



The Upper Cretaceous contains numerous remains of fossil sponges. A particularly high number of species are encountered in Campanian beds, wel-exposed in the quarries oft he cement companies. In two successive appointments the two main groups of fossil sponges are introduced (Demospongea and Hexactinellida), including facts on their life habits, occurrences as well as on the preparation process that is often long-winded. Each talk is complete, thus even attending only one of the two arrangements makes sense

8th April 2010

Lecturer: Dieter von Bargen, Ottersberg **Topic**: Fossil sponges from the Cretaceous of Hannover (part 2) **Media**: Power Point



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06th May 2010

Lecturer: Jörg Pöhl, Verden Topic: Channel systems of the ice-age in the Bremen-Verden region, Northern Germany Media: Slides



A thick cover of debris dating back to the ice-age is evident for the glaciation of Northern Germany. The glacier coverage did not only even the landscape, but also caused deepenings. This talk reports about the genesis of channel systems in the Bremen-Verden region in Northern Germany by river activity below or in front of the ice, eroding the rocks in the underground particularly intensive during the melting of glaciers. Among the hydrology of the Rotenburg channel its importance for the local waterworks is discussed.

10th June 2010

Lecturer: Albert Gerdes, Bremen **Topic:** The ocean in depth - marine sciences at the "marum" in Bremen **Media:** Power Point, Cinema show

working on.



09th September 2010

Lecturer: Michael Guhl

Topic: Changes in the plant communities of Central Europe in the Carboniferous and Cretaceous periods

Media: Power Point



This talk gives an introduction to perturbations of ecosystems and plant communities during the stone coal swamp deposition of the Carboniferous period, as well as those of the Cretaceous Greenhouse climate. Carboniferous forests contained mainly a very ethnic plant community of lycophytes, horsetails and ferns, but in the middle Permian period dramatic changes occurred. During the Cretaceous period the evolution of flowering plants caused a floral break, among other developments leading to a co-evolution of insects and other animals.

In the Center for Marine Environmental Sciences ("Marum") scientists of several institutions of the federal state of Bremen work closely together. The "Marum" aims at unraveling the role of the oceans in the Earth system by employing state-of-the-art methods. It examines the significance of the oceans in the framework of global change, quantifies interactions between the marine geosphere and biosphere, and provides information for a sustainable use of the ocean. The talk gives a brief insight to the different fields "marum" scientists are

14th October 2010

Lecturer: Werner Liebenberg, Bremen **Topic:** Geological hikes between Nîmes and the Ardèche canyon in southern France **Media:** Power Point



The lecturer talks about a geological hike in southern France, the southern part of the area between the river Rhône and the Cévennes mountain range. Marine sediments of the Cretaceous period crop out in the region Ardèche canyon and the Garrigues scrub landscape near Nîmes, containing bivalves, ammonites and belemnites among other fossils. Furthermore, the talk will also cover aspects of asphalt mining in Cenozoic limestones that has been accomplished in this area.

11th November 2010

Lecturer: Ludwig Kopp, Ritterhude **Topic:** Messel – a world-ranking Fossillagerstaette **Media:** Slides



A closed surface mining near the village of Messel in Hessen, Southern Germany, is known as the Messel pit ("Grube Messel") and famous for its fossils of superb preservation. Bacterial mats preserved even soft parts of the organisms. Fossils of mammals, among them a meanwhile larger number of early horses, but also birds and reptiles are especially outstanding and are dating back to the Eocene. The fossil primate "Ida" is regarded as close to the origin of hominids by some scientists, a fossil that is debated. The talk gives furthermore an overview about the Bremen Messel excavation in the year 1990.

09th December 2010

Lecturer: all Topic: "Weser Geo-highlight of 2010" award & Christmas celebration Media: Power Point



Many Bremen citizens have collected rocks, fossils and minerals during 2010. Therefore, to add to the general warmth of the Christmas celebration, a prize will be given for the "Exhibit of the year". The most interesting, most pretty or best prepared specimen will be voted as the "Weser Geo-highlight of 2010" and honored with a prize no matter if it has been found the Bremen area, distant regions in Europe or even from overseas. In addition, the Geo-collection will present its new acquisitions of the year and the lecture programme for the year 2011 will be released.