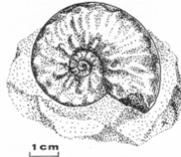




University of Bremen



Geosciences Collection
Faculty 5



**Lectures in the „Geosciences Working-Group“ (rock collectors group)
of the faculty 5 for the year 2005**

13th of January 2005

Lecturer: Prof. Dr. Wolfgang Dreybrodt

Topic: Water and rock– karst formation and caves

Media: Slides



About 10% of the Land's surface on Earth consists of limestone, for example in the northern Calcareous Alps. Since limestone is dissolvable in water, subsurface rivers occur in these regions and are fascinating for people since ever. The talk shows many slides, wandering through cave landscapes, and tries to answer how caves were formed and how to develop a computer model based on physical, chemical and geological data to visualize and understand them. Furthermore the formation of dripstones focuses on, for example stalagmites, that tells about the climate during the growth of dripstones.

10th of February 2005

Lecturer: Jörg Pöhl (Verden)

Topic: Geology in Patagonia – From the Andes to the Atlantic

Media: Slides



This talk focuses on the geology and landscape of a part of Patagonia, between the shoreline of the Atlantic and the peaks of the Andes. The Andes originate from the tectonic activity induced by the subduction zone in the eastern Pacific. This leads to a subduction of the oceanic Nazca Plate below the continental South American plate about 150 million years ago, and consequently forming the Andes since about 60 million years ago. Volcanism in the Andean realm is explosive due to subduction of large amounts of water.

10th of March 2005

Lecturer: Dipl.-Geol. Werner A. Bartholomäus (Hannover)

Topic: The rose sponge "Polyblastidium" – a rare sponge from the Upper Cretaceous and its research history

Media: Slides



This rose sponge was found only once as an erratic boulder preserved in flint stone. However, this fossil is unknown from Denmark and southern Sweden, although this represents the origin of this type of sedimentary boulder. This find led to an interesting research history, commencing in 1848 in England and continuing later on in Germany. London, Munich and Hildesheim. Two famous sponge researchers are playing an important role in this research.

14th of April 2005

Lecturer: Dr. Jürgen Pätzold (Bremen)

Topic: Natural stones as building material in the city center of Bremen

Media: Power-Point-Presentation



Whenever someone wants to go on a field-trip to see rocks of the Palaeozoic or Mesozoic there is no need for an extensive journey. The pedestrian area of our city centers natural stones are used quite often as building material and occasionally this is a much better place to study these rocks than the places where they were quarried. Exemplified by the city center of Bremen, we encourage everyone to walk through the pedestrian zone of other cities as well.

12. Mai 2005

Lecturer: Herbert Menzel (Bremen)

Topic: Granite and landscape

Media: Power-Point-Presentation



Granite is a magmatic rock that is weathering to form a unique landscape. As Hans Cloos wrote in the German book *Talks with the Earth* already: "The rocks look like rolled up to this place and brought up to a wall." The talk mainly focuses on the granite occurrence in the Karkonosze mountains in Czechia. Additionally, the scenery the talk of Herbert Menzel deals with the mineralogy of these granites, since he shows very interesting thin-sections of rocks.

09th of June 2005

Lecturer: Peter Jörres (Bremen)

Topic: Selfmade sandblasting tools for the preparation of fossils

Media: Power-Point-Presentation



The preparation of fossils by using a sandblasting technique has become more and more popular during the past years. This method contrasts chemical techniques by not leaving any residues on the fossils and is more conservative compared to preparation with mechanical pens. For this reason, Peter Jörres invented a sandblaster by himself that is economical, but produces similarly good results as a commercial tool.

14th of July 2005

Lecturer: Alan Marsh & Jürgen Reinhard (Sandhausen & Bremen)

Topic: Fossillagerstaette Neufchâteau in northern France

Media: Power-Point-Presentation



For a few years a quarry has exposed Middle Jurassic rocks in the vicinity of Neufchâteau in the Département Vosges in France, containing a rich fauna of fossil echinoderms. Images of field-work and preparation of rock slabs, with dozens of sea-urchins are shown that partly reveal its spines preserved. Furthermore, the genesis of this fossillagerstaette is discussed. Obviously the embedding took place very quickly, since even finest details are visible.

8th of September 2005

Lecturer: Ludwig Kopp (Ritterhude)

Topic: Twistingingen – a “classical” locality in palaeontology

Media: Power-Point-Presentation



In between 1806 and 1992 the Sunder pit in Twistingingen, about 40km S of Bremen, was open to quarry for claystone. The clay pit was a place where scientists and amateur palaeontologists met to collect molluscan fossils in the Miocene beds that are about 15 million years old. The last scientific summary about these fossils was written in 1992, just when the quarrying for clay came to its end. Ludwig Kopp talks about new results concerning the fauna since then and shows that a new project would be worthwhile.

13th of October 2005

Lecturer: Michael Guhl (Bremen)

Topic: Solnhofen and its fossils

Media: Power-Point- Presentation



Solnhofen is a small village on the Franconian Alb in Bavaria that is known around the world. This is true since the laminated limestones of the Jurassic period, about 140 million years ago, yields numerous unique fossils. Particularly the early bird *Archaeopteryx* is broadly known. Furthermore, Michael Guhl shows in his talk a large number of other organisms that were found as fossils at this locality. The inventory comprises more than 1000 species, including crocodiles, reptiles and turtles.

10th of November 2005

Lecturer: Werner Liebenberg (Bremen)

Topic: The Liassic of the Causse du Larzac in southern France

Media: Power-Point-Presentation



Die Causse du Larzac is a highland in the central part of southern France. The sparse vegetation makes it easy to get familiar with the geological nature of the area. Werner Liebenberg talks especially about the Lower Jurassic (Liassic) and its fossils. During the earliest Jurassic, dinosaur trackways are evident for a terrestrial ecosystem, the remaining Liassic of the Causse du Larzac is fully marine, containing a rich fauna of ammonites, belemnites, bivalves and gastropods.

8th of December 2005

Lecturer: All/Dr. Jens Lehmann (Bremen)

Topic: Christmas party

Media: Power-Point-Presentation



At the end of the year, the head of the collection, Dr. Jens Lehmann, is summarizing the work done in the year 2005. The images of looking back on the year 2005 will be dominated by moving into the new Alfred Merz building. Furthermore, slides of particularly interesting new specimens of the collection will be shown. The staff of the collection offers tea and coffee, other drinks and cookies, sweets etc. are brought by the audience. Happy Holidays to all.

