Universität Bremen

Geowissenschaftliche Sammlung FB5

Geosciences Working Group 2009

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 7 pm on each second Thursday of the month. 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

08th January 2009

Lecturer: Dr. Joachim Blankenburg (Bremen)
Topic: Whereto with the rainwater?
Media: Power Point

The Geological Service for the city of Bremen holds data on borings in the country of Bremen. All data will be available digital until the year 2011. A methodology is developed for the evaluation of maps. A practical appliance is the infiltration of rainwater and the drainage close to the surface. In the Bremen Nord area conclusions are possible on a larger plain already. In this talk methods are introduced and detailed information is given for the dewatering problem of the Bremen turf and the Stadtwald area.

12th February 2009

Lecturer: Hans Christian Küchelmann (Bremen)
Topic: On the tracks of Phoenician purple traders
Media: Power Point

Mogador is a small city off the city of Essaouira at the Atlantic coast of Morocco. Excavations since the 1950th indicate an early Phoenician settlements dating back to the 7th century before Christ. Following historical sources it might be assumed that this is the purple island mentioned by Plinius. This talk refers to the first results of a common excavation of the German Archaeological Institute in Madrid and the Moroccan authority for the conservation of ancient monuments, initiated in 2006. A large number of mollusks have been unearthed, the determination of this material was realised referring to material in the Geosciences Collection of the University of Bremen.

12th March 2009

Lecturer: Jürgen Reinhard (Bremen)
Topic: Fossils from the chalk of Belgium
Media: Power Point

In the border triangle between Germany, the Netherlands and Belgium 60 to 65 million years old sedimentary deposits are found. These chalky limestones have been deposited in a shallow sea close to the end of the Late Cretaceous period. Fossils of bivalves, gastropods, sea urchins and last representatives of ammonites are encountered. Among the rare fossils of reptiles those of mosasaurs are best-known, these are several meter long reptiles that lived in the sea and are related to modern monitor lizards.

2nd April 2009

Lecturer: Werner Liebenberg (Bremen)
Topic: Geological hikes in southern France: between the River Rhône and the Cévennes mountain range
Media: Power Point

The tutor is talking again about his exciting geological hikes in southern France. At this occasion he talks about the area between the southern River Rhône and the Cévennes mountain range. In the small area of the Plâteau de Coiron volcanic rock crops out that is 6 to 8 million years old. Furthermore, marine deposits of the Middle and Late Jurassic period are discussed. These sediments contain fossils of bivalves, gastropods and ammonites among others.

14th May 2009

Lecturer: Dr. Jürgen Pätzold (Bremen)
Topic: The Rammelsberg in the Harz mountains – An ore deposit listed as UNESCO heritage site
Media: Power Point

380 million years ago a stream hot and metal rich fluid and gas went into a sea. Million of years later the sea turns into main land and later a mountain range raised in the area. The Rammelsberg ore deposit near Goslar started to emerge at a spot that is today a part of the Harz mountains. For more than 1000 years this place has been mined, it is one of the richest ore deposits of the world. Zinc, lead and copper ores as well as the desired coin metals silver and gold have been raised. The talk focuses on the genesis of the ore deposit as well as the history of the mining until the closure of the mine in 1988.

12. June 2009

Lecturer: Michael Guhl (Bremen)
Topic: Darwin's "abominable mystery": Origin and evolution of flowering plants
Media: Power Point

Flowering plants are the largest and most diverse group of land plants, comprising more than 250 000 species. Their origin has been a mystery for a long period of time. Darwin already called this an "abominable mystery". There has been the clear evidence that they rule all terrestrial ecosystems since their first appearance in the Early Cretaceous until today. For the past ten years there is great progress in understanding the origin and relations of flowering plants by new fossils as well as by research on the DNA of modern plants. This talk is summarizing the modern view, images of the phylogenetically most important fossils and recent flowering plants are shown.

9th July 2009

Lecturer: Prof. Carsten Brauckmann & Dr. Elke Gröning (beide Clausthal)
Topic: About the oldest insects – new findings in recent years
Media: Power Point

The fossil record of insects starts in the Devonian, about 400 million years ago, with remains of primitive wingless animals. The oldest fossils of flying insects yet known are clearly younger. They are dating back to the youngest Early Carboniferous and the latest Late Carboniferous, thus these findings are about 325 million years old. Until recent years only about 30 poorly preserved fossils have been recorded worldwide. This changed by the discovery of the Hagen-Vorhalle locality, nowadays a world-famous site. Since 1982 more than 300 well-preserved specimens have been collected there, allowing a new insight into the early evolution of this group of organisms.

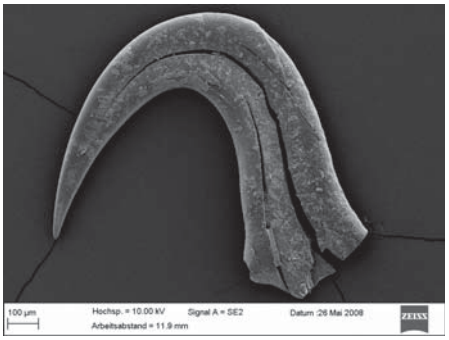
10th September 2009

Lecturer: Dr. Jens Lehmann (Bremen) & Martin Krogmann (Bremen)
Topic: Methods of geological field-work – From sampling to publishing data
Media: Power Point

How do we know about processes in Earth history like climate change, changes of environments from land to sea, changes of ancient ecosystems or the origin of mountain ranges? This talk trys to give answers by analysing geological field observations and by giving example showing images of outcrops. Examples are given to explain procedures and techniques as well as to demonstrate the equipment needed, e.g. geological compass and Gamma ray device. The results of field-work are summarised in geological profiles or sections, these are drawings of time slices through parts of the Earth History.

8th October 2009

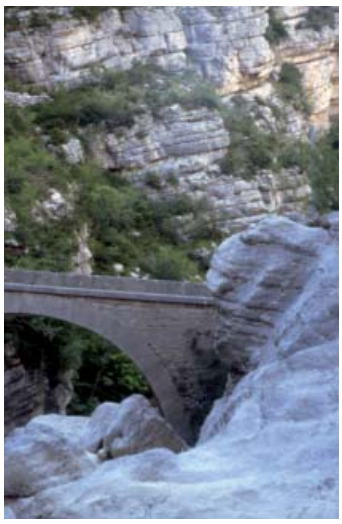
Lecturer: Alexandra Solarczyk & Dr. Jens Lehmann (Bremen)
Topic: Fossils of the belemnite animal
Media: Power Point



Belemnites, also called "Devil's Thunderbolts" or "Devil's Fingers", are the internal skeletons of an extinct group of animals that are related to modern squids. Their fossils are abundant in rocks of the Jurassic and Cretaceous period. For quite a few years fossils of the belemnite animal itself are known, showing soft parts additionally to the calcareous internal skeleton. Onychites are chitinuous catching hooklets of belemnites and also only present under when the preservational conditions are excellent. Onychites are occasionally found in microfossil samples, this talk demonstrates the possibility of relating those fossils to specific belemnites.

12th November 2009

Lecturer: Werner Liebenberg (Bremen)
Topic: Water shapes landscapes
Media: Power Point



The fascinating journey of a raindrop travelling through the landscape is traced. The route starts with the surface erosion caused by a water drop. It is continuing with the drain away of streams and rivers into subsurface waterways. At sources or at waterfalls the water surfaces again – equal if originating from small Karst cracks or large cave systems. Lime, dissolved in water, might drop out and led to sinter deposits. Water shapes landscape essentially – a fact illustrated in the talk with photos taken in southern France.

10th December 2009

Lecturer: all
Topic: „Weser Geo-highlight of 2008" award & Christmas celebration
Media: Power Point

Many Bremen citizens have collected rocks, fossils and minerals during 2009. 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 2007" 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. The program of talks for 2010 will also be introduced.