

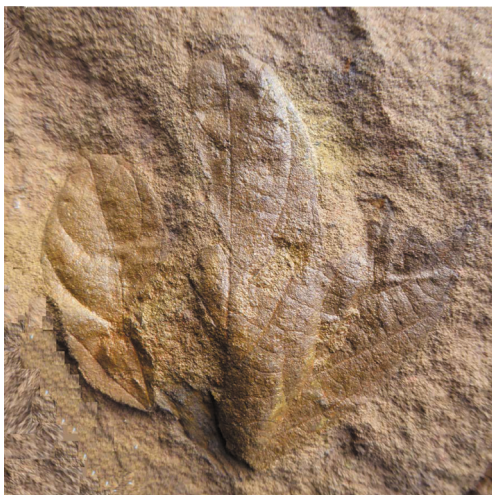
Geosciences Working Group 2016

The Geosciences Working Group of the Faculty 5 of the University of Bremen offers an introduction to geology, palaeontology and mineralogy to the public every second Thursday of the month at 7:20 pm. These meetings give the chance to discuss with each other and to get advice from a scientist. The meetings include a generally comprehensible talk on geoscientific topics. Further information can be found on our homepage:
www.geosammlung.uni-bremen.de

14th January 2016

Lecturer: Hartmut Benthien

Topic: The angiosperms in the Mesozoic – (R)evolutionary strategies



The evolution of plants, and particularly that of the flowering plants (angiosperms), was supported by the interaction with various animals. However, in the first instance there are three basic requirements achieved by the angiosperms itself:

A maximized photosynthesis, an optimized water supply and mass transport based on a powerful vascular system. Their reproduction by flowers and seeds is based on an evolution driven by mutations. At the end of the talk an overview on the systematic is given as well as a discussion of how the findings are related to today.

11th February 2016

Lecturer: Dieter von Bargaen

Topic: North America during the Late Cretaceous period - paddling pool of the dinosaurs



Since 100 million years ago to the end of the Cretaceous period central North America has been covered by a shallow sea. A variety of different animals inhabited this sea, among these there were hundreds of ammonite species and marine reptiles. Meanwhile giant herds of dinosaurs walked on the adjacent mainland, some of their fossil bones are abundantly found in the sediments today. The talk not just illustrates nice fossils from this area, but reports also about the ancient environment and its change.

10th March 2016

Lecturer: Werner Liebenberg

Topic: Poisoned oceans – the Oceanic Anoxic Events



The term „Oceanic Anoxic Event“ (OAE) is describing periods during the Earth history when the oceans were impoverished by oxygen. These intervals were associated with extinction and radiation events of individual groups of animals and plants. The background and mechanisms are highly complex and intensively debated in modern science. It is suggested that OAEs are associated with modified ocean currents as well as an increased greenhouse gas and global warming.

14th April 2016

Lecturer: PD Dr. Jens Lehmann

Topic: Saber-toothed cat and ice-age elephant – the „Rancho La Brea tar pits“ in Los Angeles, USA



The Hancock Park in the American metropolis Los Angeles is located in a megacity today. Thus it is hardly imaginable that there have been tar pits in this area about 40.000 to 10.000 years ago, preserving one of the most fossiliferous localities of the ice ages until today. There is a total number of about 60 different species of mammals known from this site - ranging from small mice to giant elephants. Most famous is the California State Fossil - the saber-toothed cat with its dangerous ripper teeth. The talk shows specimens on display on the museum and at the excavation sites as well as reconstructions of the ancient animal and plant association.

07th May 2016

Lecturer: Jürgen Reinhardt

Topic: The „Jurassic Coast“ in southern England - a unique view into Earth history

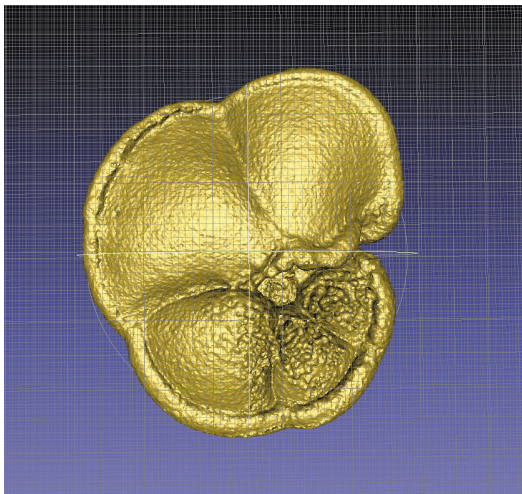


In December 2001 the UNESCO declared a more than 150km long coastal strip along the coast of Devon and East Devon as natural world heritage. This lifts the area at the same level as the Grand Canyon and the Great Barrier Reef. A good reason to celebrate this and thus the British heir of the throne was opening this heritage area officially one year later. The talk reports about this geologically unique and very scenic landscape, shows fossils collected here and illustrates rocks out of more than 200 million years of Earth history that are cropping out in a comparatively small area. Thus this talk covers far more than the name-giving interval, the Jurassic period, of this coast section.

9th Juny 2016

Lecturer: Dr. Michael Siccha

Topic: 3D prints of microfossil



Novel technical developments in the field of X-ray microtomography (μ CT), as well as in 3D printing, allows the print of high resolution models of microfossils for teaching and display. Exemplified by a planktic foraminifera specimen the process of scanning a microfossil by a μ CT is illustrated during the talk, followed by its reconstruction by a computer and finally by the print of the model.

8th September 2016

Lecturer: Harald Rohe

Topic: As far as the feet will let you walk - Impressions of a geological journey to Svalbard



During this talk an experienced fossil collector reports about his journey to Svalbard and what made this trip to an adventure. The history and nature of this island is described as well as the experience and dangers during the journey are portrayed. Do you know that there has been mining for hard coal on Svalbard once? Today this paradise of nature with its glaciers is owned almost exclusively by its polar bears again - humans are only tolerated guests.

13th October 2016

Lecturer: Dieter Siebert

Topic: Mosasaurs and bivalves - Fascinating fossils from the Stemwede mountain ridge in North Germany



The Stemwede mountain ridge is located at the boundary between the German federal states of Northrhine-Westphalia and Lower Saxony. It is the northernmost and the smallest mountain ridge in Germany, with the highest elevation reaching 181 m above sea level. Geologists know these mountains very well since centuries, since lots of fossils were found here while mining the sandy limestone. This includes common bivalves, belemnites and ammonites, but also rare findings like the teeth and bones of marine reptiles. The period at the beginning of the 1980th was also very productive at Stemwede, when many collectors found a huge number of fossils at a large building-site.

10th November 2016

Lecturer: Ludwig Kopp

Topic: Heading for the ice age - fossils and sediments of the Neogene period in North Germany



The Neogene is a period of Earth history - in between around 23 and 2.5 million years ago. The climate was subtropical until a cooling at its younger limit - pointing to the close onset of the ice-ages. Focussed on the evolution of vertebrates the radiation of birds and mammals was crucial for the Neogene, and the evolution of molluscs underwent a major change on the field of invertebrates. Fossils of the latter are particular abundant in rocks of the Neogene as the lecturer experienced at many sites in Europe and beyond. However, the focus of this talks is very specific - the Neogene of North Germany.

8th December 2016

Lecturer: all

Topic: „Weser Geo-highlight 2016“ award & Christmas celebration



Many Bremen citizens collected rocks, fossils and minerals during 2016. Therefore, to add to the general warmth of the Christmas celebration, a prize is given for the “Exhibit of the year”. The most interesting, most pretty or best prepared specimen is voted as the “Weser Geo-highlight 2016” and honored with a prize - no matter if the find originates from the Bremen area, distant regions in Europe or even from overseas. In addition, the Geo-collection is presenting its new acquisitions of the year and the lecture programme for the year 2017 is released.