

## Geosciences Working Group 2013

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](http://www.geosammlung.uni-bremen.de)

**10th January 2013**

**Lecturer:** Anne Kremer

**Topic:** Spines, clubs and limy envelopes - new arrangement of the sea urchins in the Geosciences Collection



Echinoderms, like sea urchins, crinoids and star fish, occur throughout all environments of the world's oceans. This includes the polar regions, tropical areas, coastal areas as well as deep sea environments. The largest number of the 4000 echinoderm specimen in the Geosciences Collection are sea urchins. This includes fossils collected for the past 300 years, from nearby and very far away - sea urchins from all over the world. A detailed view pays off.

**14th February 2013**

**Lecturer:** PD Dr. Jens Lehmann

**Topic:** Diving into the Early Cretaceous period – geological hikes on the Isle of Wight

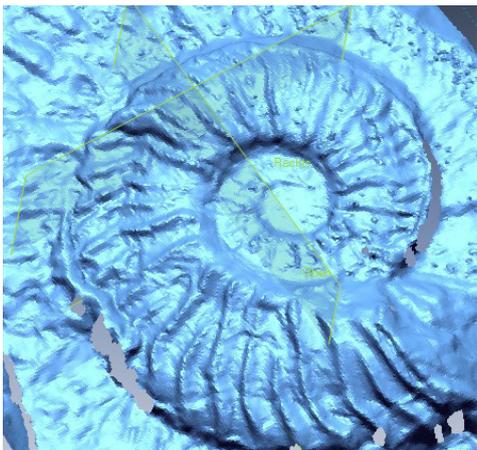


During the early Cretaceous period parts of southern England have been flooded by an enormous transgression. The dinosaurs disappeared and where floodplains just still existed a warm shallow sea began to spread. Impressive large ammonites lived in this sea, accompanied by large snails, thousands of oysters, lobsters as well as plesio- and ichthyosaurs. The talk illustrates the history of this sea from its beginning, 125 million years ago, until the opening of the British Proto-channel about 120 million years ago that opened a connection to the Tethyan Sea in the south.

**14th March 2013**

**Lecturer:** Julia Dreßel & Julia Engelke

**Topic:** Ammonite fossils that are old as the hills meet modern technology



Ammonites are favoured for more than 200 years by collectors and scientists and thus became heraldic animals in geology. Ammonite classification is based on the features and subjective descriptions for decades, but new technologies change the way ammonites are investigated. This talk tries to illustrate 3D modelling of ammonite shells and their analysis.

**11th April 2013**

**Lecturer:** Werner Liebenberg

**Topic:** The giant of Provence and deep canyons - travelling between Mont Ventoux and Vercors

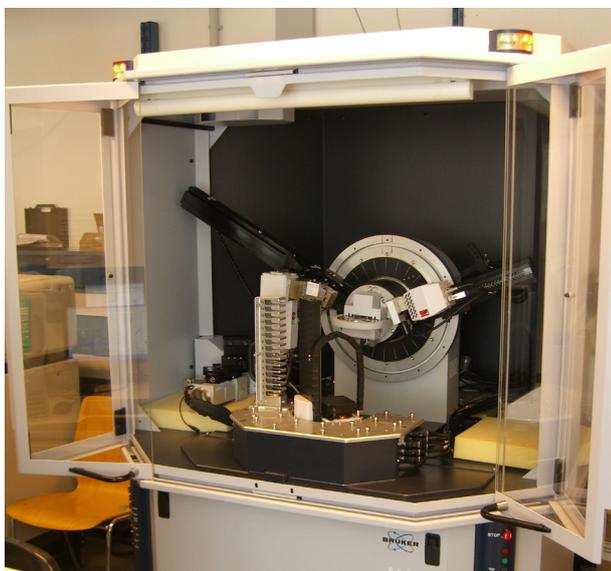


Among the shades of Mont Ventoux we undertake a geological expedition through deep canyons and upon lonely plateaus in the Baronnies and Diois areas. The landscape is highly structured by mountain building and a number of geological features can be experienced.

**16th May 2013**

**Lecturer:** Dr. Michael Wendschuh

**Topic:** Crystals and structures – minerals under x-rays

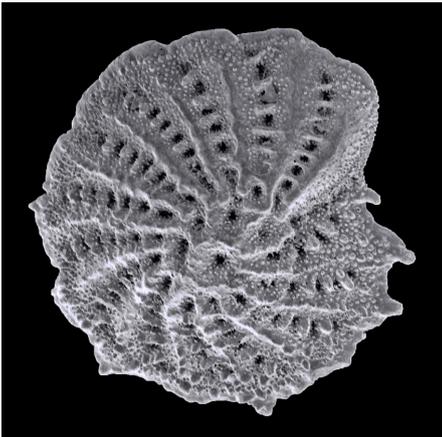


In the study of minerals the application of X-ray is an indispensable tool. All three classic methods of X-ray examination are applied: imaging, spectroscopy and diffraction methods. Each of these techniques provides distinct information about the studied minerals. The lecture will present all the methods, with the main emphasis will be placed on the X-ray diffraction to identify minerals.

**13th June 2013**

**Lecturer:** Michael Hesemann

**Topic:** Foraminifers – contemporary witness of Earth's history



Foraminifers are abundantly occurring unicellular animals in the ocean. Foraminifera tests are recorded in marine sediments since the Cambrian period. The richly illustrated talk gives an introduction into the world of these widely unknown sea dwellers and fossils: What are foraminifers, how did they live, which scientific and economic importance do they have? The talk also focusses on aspects of collecting foraminifera and which tools are needed. The lecturer, Michael Hesemann from Hamburg, is hosting the Foraminifera.eu Projekt and additional information can be found here: [www.foraminifera.eu](http://www.foraminifera.eu)

**08th August 2013**

**Lecturer:** Michael Guhl

**Topic:** Fossils from Mars?



Our neighbored planet has been a matter of speculation for extraterrestrial life since the beginning of time. Although no aliens have been discovered yet sondes have been visiting Mars and did research for life or the preconditions for life. The talk reports about these attendances and their results, starting with the Viking sondes and ending up with Curiosity as the latest release. There are several hints for a much warmer climate and liquid water during an early phase of Mars that is a cold and dry desert planet today. Additionally, it is reported about the Mars meteorite ALH 84001 that includes fossil-like structures.

**12th September 2013**

**Lecturer:** Dieter von Bargaen & PD Dr. Jens Lehmann

**Topic:** Life without oxygen? Fossils from Alstätte, Westphalia



During the Cretaceous period there have been several times with a lowered oxygen content in the seas and oceans. Sedimentation of sapropels is known nowadays as dark claystone, also called black shale. This talk reports about the ongoing research in Westphalia of the Geosciences Collection that is focusing on one of these events, taking place about 120 million years before present. Special attention is paid to present bonny photos of fossils.

**10th October 2013**

**Lecturer:** Ludwig Kopp

**Topic:** “Nordic gold” in the south – amber from the Alps



Amber is also called “Nordic gold” in German, since it can be found at the coastlines of North- and Baltic Sea. Less well-known is amber from the Alps. In contrast to amber from the sea this is still enclosed within the host rock und needs to be revealed exhaustingly by breaking the rock material.

**14th November 2013**

**Lecturer:** Udo Frerichs

**Topic:** Hunting fossils in the Toarcian of Yorkshire



An overview about the landscape of Yorkshire is given, including an introduction to the fossil localities in the city of Whitby and its surroundings. The lecturer presents information about the accessibility and risks as well as an introduction to the stratigraphy. Photos of typical fossils like ammonites, belemnites, marine reptiles, clams and plants are illustrating the fossil content of the rocks. Illustrative material is presented.

**12th December 2013**

**Lecturer:** all

**Topic:** „Weser Geo-highlight 2013“ award & Christmas celebration



Many Bremen citizens have collected rocks, fossils and minerals during 2013. 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 2013” 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 2014 will be released.