

## Geosciences Working Group 2021

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)

**14th January 2021**

**Lecturer:** Frank Lisker

**Topic:** A geological journey to Cornwall - Part 1

**Youtube:** <https://youtu.be/WMmyUpQ5Lyo>



Cornwall - that stands for English Riviera, romantic beaches, steep cliffs, lush gardens, gloomy moors and romantic love movies based on Rosamunde Pilcher. The idyllic landscapes of the county result from a geology that was shaped by the Variscan orogeny - a mountain building also influenced the Erzgebirge, the Harz mountains and large parts of southern and western Germany 400-250 million years ago. In Cornwall, large granite complexes formed, including ores that are an important basis for the wealth of England for several centuries. Especially the spectacular folds of the Cornish cliffs catch the eye, which should not be missing in any serious textbook of tectonics.

**11th February 2021**

**Lecturer:** Jens Lehmann

**Topic:** A geological journey to Cornwall - Part 2

**Youtube:** <https://youtu.be/MesCkZ1Lzbo>



The second virtual trip to Cornwall will mainly focus on the sedimentary rocks of the Carboniferous. During the Carboniferous period, swamp forests and the resulting coal are a central theme in Central Europe. On the steep coasts in the north of Cornwall, however, there are almost no coal-bearing rock layers in the cliffs that have been gnawed away by erosion. Instead, the sedimentary layers here consist of sandstones or rocks called greywacke. These have been deposited in the sea, but also in brackish or freshwater lakes. The rocks sometimes contain interesting trace fossils and rarely fossil fish also.

**18th March 2021**

**Lecturers:** Prof. Dr. Jens Lehmann

**Topic:** Floodplains from the time of the dinosaurs - the Wealden facies

**Youtube:** <https://youtu.be/UhyTT1t90iQ>



The term Wealden refers to continental sediments of the Lower Cretaceous period. They were deposited in fresh and brackish water of floodplains or in lagoons. The term is derived from the name of the southern English landscape Weald. Not only its dynamic deposition conditions, but also the fossils are exciting about Wealden. Fossils include wood and other plant remains, turtles, sharks, crocodiles. Especially outstanding are the tracks of dinosaurs and their bones. Last but not least the most important dinosaur finds of Europe come from the Wealden.

**15th April 2021**

**Lecturer:** Harald Rohe

**Topic:** An almost unknown world - insect remains from around the Jurassic/Cretaceous boundary in Lower Saxony

**Youtube:** <https://youtu.be/boSCj9J1HrU>



The late Jurassic and early Cretaceous are poorly exposed in Lower Saxony. Although the principal sequence of the strata is known, the fossil record is rather poorly described. Exceptions are for example the dinosaur tracks from the natural monument Münchehagen. However, these rocks of the latest Jurassic and earliest Cretaceous period allow a much more detailed insight into the land ecosystems of these bygone times, which had much more to offer than giant reptiles. The small fossils reported in this lecture are at least as exciting - meant is the so far almost unknown fossil insect world from Germany. The lecture gives a first insight into this topic that is scientifically poorly known yet.

**6th May 2021**

**Lecturer:** Werner Liebenberg

**Topic:** Johann Wolfgang von Goethe - Poet and Geologist

**Youtube:** <https://youtu.be/YTWbYzcMIOI>



As advisor to Duke Carl August von Sachsen-Weimar-Eisenach (1757-1828), Goethe was also working for universities and in the mining business. This is a reason why he intensively studied geology and mining. In this context, he undertook three Harz journeys, on which he visited mines and collected minerals and rocks. In this talk the stops of these Harz journeys are viewed from today's point of view.

**10th Juny 2021**

**Lecturer:** Bastian Hische & Jakob Quabeck

**Topic:** Clay, Sand and Gravel - Lacquer Films as Archives of the Ice Age

**Youtube:** <https://youtu.be/jwNfikUpHNw>



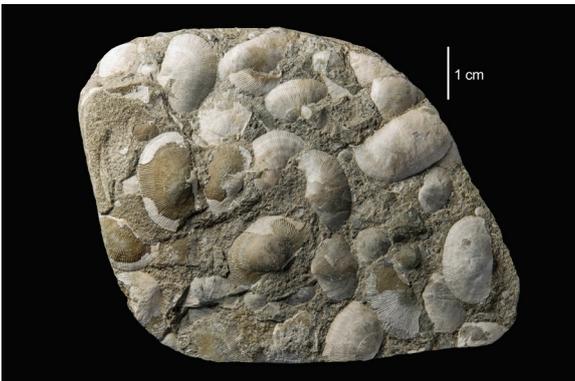
The North German region was significantly shaped by ice ages in the geologically near past. Sediments play an important role in the study of the ice ages, as their structures provide insights into the conditions that led to their formation. Lacquer films, so to speak imprints of the layers in the subsurface, offer a particularly vivid representation of such glacial deposits. The Geosciences Collection of the University of Bremen recently received some exciting lacquer films with which we can look into the region's glacial past!

**9th September 2021**

**Lecturer:** Harald Rohe

**Topic:** Erratic boulders and fossils from the Münsterland gravel sand train

**Youtube:** <https://youtu.be/X22-iplrboQ>



If you are fascinated by the history of the Earth, its diverse rock types and evolutionary processes evidenced by fossils, you will get your money's worth especially with erratic boulders. Erratic boulders are rocks eroded and redeposited by glaciers, often far from their place of origin. Such rocks are found around the Baltic Sea for example, but have been transported as far south as the Ruhr area. In this lecture erratic boulders and fossils from the Münsterland gravel sand train are in the focus, at the border of North Rhine-Westphalia and Lower Saxony. Here, a particularly wide range of different rocks is found, since the ice transported also many local rocks additionally to the rock from that have been transported a long distance.

**14th October 2021**

**Lecturer:** Prof. Dr. Jens Lehmann

**Topic:** Geology of Bornholm - The granites and the Cambrian period

**Youtube:** <https://youtu.be/tghFBqQyHk8>



The Danish island of Bornholm is geologically and scenically very diverse. The north of this Baltic Sea island is characterized by rocky, steep granite coasts. In the south there are long sandy beaches and white chalk cliffs. This lecture gives personal impressions about its geology and palaeontology and beyond. This first part is mainly about igneous rocks and deposits of the early Palaeozoic on the island, including aspects of the use of geological resources.

**11th November 2021**

**Lecturer:** Prof. Dr. Jens Lehmann

**Topic:** Geology of Bornholm - From the Ordovician to the Cretaceous

**Youtube:** <https://youtu.be/1Ng0dQdySuM>



This travelogue about the Danish island Bornholm deals with the geology beyond the granite coasts and the sandstones of the earliest Palaeozoic. Deposits and their fossils from rocks since the Ordovician - more than 450 million years ago - are presented. Beautiful landscape pictures as well as photographs of fossils are shown. Furthermore, the former phosphate mining and commercial exploitation of other rocks is discussed.

**9th December 2021**

**Lecturer:** Prof. Dr. Oliver Friedrich

**Topic:** Geological excursions in the Vocontic Basin in the South of France

**Youtube:** <https://youtu.be/B9e8jkVBTg0>



From the Late Jurassic to the Late Cretaceous, a marine basin surrounded by carbonate platforms extended where the Rhône Valley is located today. Sediments and fossils of this depositional realm in the French Alps are varied. The deeper parts of this basin is called the Vocontic Trough or the Vocontic Basin. Especially the „Oceanic Anoxic Events“ (OAEs), more or less globally distributed black shale deposits, are of interest to geoscientists as oxygen deficient sediments.