



Universität  
Bremen



## Geosciences Working Group 2023

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)

**12th of January 2023**

**Lecturer:** Lutz Kaecke

**Topic:** Fossil accumulations and sheltered preservation in cephalopod body chambers

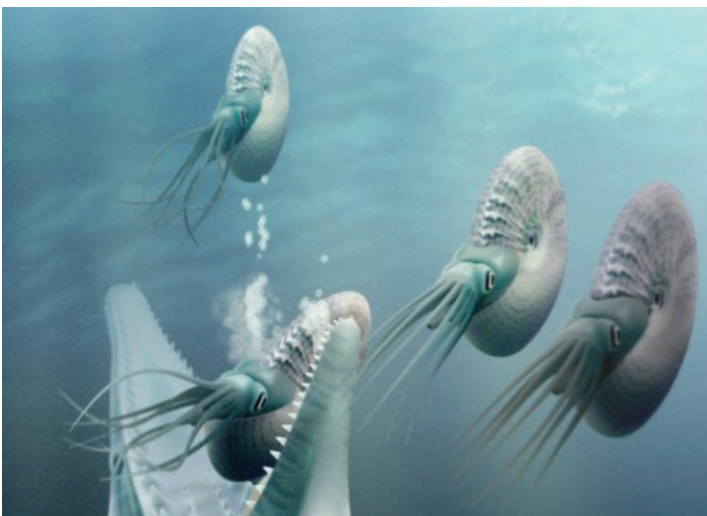


Empty body chambers of cephalopods may contain accumulations of fossils, often these are better preserved compared to the surrounding rock. The lecture of Lutz Kaecke deals with the possible origin and the significance of individual finds. Actual specimens and images from the Paleozoic and the Mesozoic are shown.

**9th of February 2023**

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

**Topic:** Enigmatic ammonites - New insights into biology and lifestyle



Ammonites lived on our planet for over 300 million years, they are often very common and thousands and thousands of their fossils can be found in rocks - from the Devonian age to the Cretaceous. However, extremely little is known about their way of life and biology. In this lecture, new research results will be highlighted and presented, which limits the increase in knowledge. Among other things, morphological changes in ammonite shells will be compared with palaeotemperature data, sea level changes, fluctuations in oxygen content and microfossil associations.

**9th of March 2023**

**Lecturers:** Werner Liebenberg

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



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

**13th of April 2023**

**Lecturer:** Anne Hübner

**Topic:** Rocks from Antarctica - not all ice after all?



Sampling rocks can be very exciting. A preparator from the Department of Polar Geodynamics vividly tells of collecting rocks under extreme climatic conditions, both on land with the help of helicopters and from the seabed by the research vessel „Polarstern“. The highlights and special challenges during the 2½-month expedition from Cape Town via Antarctica to Punta Arenas are reported.

**11th of May 2023**

**Lecturer:** Dr. Ulrich Kotthoff

**Topic:** Our feathered enemies - (Co-)evolution of birds and mammals.



The evolutionary history of mammals and their sister groups on the one hand and birds and the closely related dinosaurs on the other is extremely exciting and characterized by power shifts. Both groups of animals went separate ways in terms of evolution since the late Carboniferous and competed for ecological niches. The talk will explain how, over the past roughly 300 million years, sometimes one group, sometimes the other, has been at the top of food chains in marine and terrestrial ecosystems, and how they have influenced each other in the process. However, conciliatory examples of cooperation between birds and mammals and the threat to today's forms by humans will also be addressed.



**15th of Juny 2023**

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

**Topic:** Exploration on Spitsbergen - A Journey into the Triassic Period



In August 2022, an international team of scientists embarked on an unusual expedition to Spitsbergen with the support of the German Research Foundation (DFG). The east coast of the archipelago was explored by sailing boat - with a focus on the rocks of the early Triassic period and their fossils. The exploration of new research fields around the early evolution of ichthyosaurs and the first Triassic ammonoids after the mass extinction at the Permian/Triassic boundary were the goal of this trip, which is reported on here.

**14th of September 2023**

**Lecturer:** Jürgen Reinhardt

**Topic:** Langenberg Quarry - Window into the Mesozoic Era



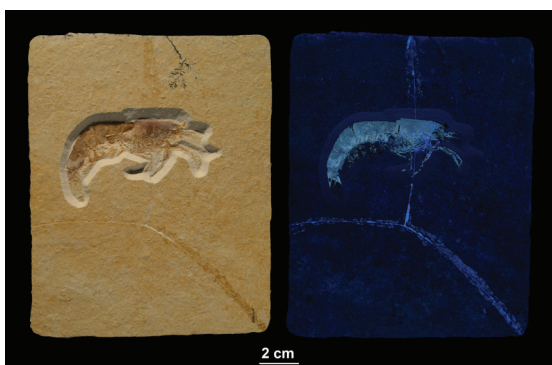
The Langenberg limestone quarry in Lower Saxony is one of the most outstanding fossil sites in Germany. The finds offer a unique view into the Jurassic period in Germany. Of particular rarity here are the dwarfed dinosaurs such as the Europasaurus. A real Jurassic Park!

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**12th of October 2023**

**Lecturer:** Martin Krogmann

**Topic:** Invisible Light Reveals Hidden Worlds - UV-Fluorescence-Photography



Ultraviolet light can cause some minerals to fluoresce. This refers to spontaneously emitted light shortly after a material is stimulated by light. In paleontology, this phenomenon has long been used to detect and document details of fossils such as skin preservation, color patterns, and the like. In recent years, inexpensive UV LEDs have made this technique affordable for amateurs. The lecture is a general introduction to the subject, but also shares practical experiences from the Geowissenschaftliche Sammlung Bremen.

**9th of November 2023**

**Lecturer:** Dieter Siebert

**Topic:** Petrified forest in Chemnitz



In the Permian, 290 million years ago, a volcanic eruption destroyed the forest in Chemnitz. Its petrified wood was found over and over again during construction works in the city center. Today several very impressive logs are on display in the Museum für Naturkunde Chemnitz. This talks reports about an excursion to Chemnitz by the VFMG group Celle in 2010.

**14th of December 2023**

**Lecturer:** all

**Topic:** „Weser Geo-highlight 2023“ award & Christmas celebration



Many Bremen citizens collected rocks, fossils and minerals during 2023. 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 2023” 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 2024 is released.