

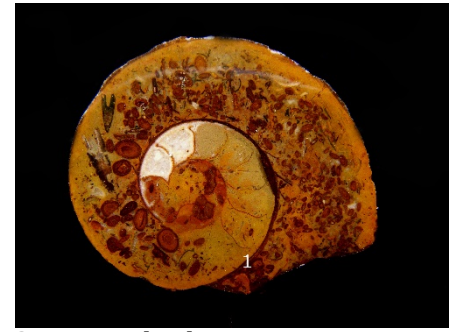
How does calcite gets into a pyritized ammonite



1-3 1-Normal: With pyrite covered chambers which are filled with calcite



2-Unusual: Chambers nearly totally filled with pyrite

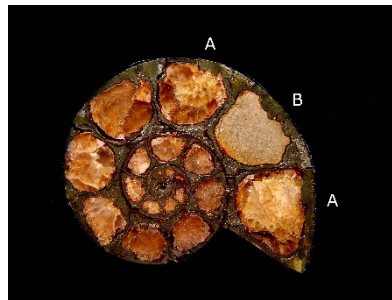


3-Unusual: Phragmocone starting approx. at 1, then a filling with fine sediment follows, then 2 chambers with white calcite and the centre seems to be (at least no longer visible).

Fossil filling (specially the tiny ammonite)



1-3 1-Normal: Phragmocone seems to start at 1, living chamber filled with different objects (so called fossil trap, see x= tiny ammonite /youth ontogenetic stage)



2-Unusual: Chambers at A filled with calcite, B must have been filled with sediment from outside as siphon is still not destroyed



3-Unusual: Living chamber filled with objects of different size. The phragmocone from 1 on filled with fine sediment, then with calcite. What was first: the fine sediment or the white calcite?

It seems to be logical, that the inner coverage of the phragmocone (=organic substance, which helped to exchange the gas filling via siphon) after death of the animal decayed and so giving hydrogensulfide to the surrounding. If iron ions exist in the water, as a result with H_2S were producing Ironsulfide = pyrite (which is practical unsoluble in water). So as long as water could circulate, pyrite could be the result. As iron ions plus H_2S as a result produce a practical unsoluble product, they so retract the highly poisonous H_2S out of the water.

The reaction with oxygen is not as drastic, but retract as well the poisonous H_2S in the water. But by that the valuable oxygen for breathing is as well lost.

And how does it look like with calcite? This substance is nearly completely insoluble in water. Very long time ranges may explain that nevertheless enough for cristallisation may have been delivered. But how is it possible that one chamber is filled with fine sediment and by that the siphon is blocked, but nevertheless the following chambers have been filled with calcite?