

GALENA

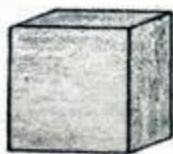
PbS

Lead Sulphide

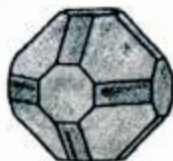
Galena, which is the most important lead ore, is widely distributed. The most common occurrence is in hydrothermal veins which arise as the result of faulting in bedded sedimentary rocks. It is associated with minerals such as sphalerite, chalcopyrite, and pyrite, also with gangue minerals such as calcite, fluorite, and quartz.. Galena may also be found as a replacement mineral in some limestones and dolomites. It crystallises in the cubic system, resulting in cubic crystals, or more rarely as octahedral crystals. silver sulphide is usually to be found in combination with lead sulphide, making galena an important source of silver. Galena oxidises readily to create alteration minerals such as cerrusite, pyromorphite, or anglesite.

Lead, which is extracted from galena, is used widely in lead-acid vehicle batteries. It was once used in the manufacture of water pipes until it was realised that there was a danger of poisoning from drinking the water which passed through the pipes. For the same reason the use of lead in the paint manufacturing industry was discontinued. The mineral silver, which is also extracted from galena has it's uses in jewellery, cutlery, and tableware. Because of it's high conductivity, silver is also used in the electronics industry

THE TWO CRYSTAL HABITS OF GALENA, BOTH IN THE CUBIC SYSTEM



CUBIC CRYSTAL



OCTAHEDRAL CRYSTAL