Crystals and archaeology

Objects found in ancient burial sites are often crystalline in structure and well preserved. Their crystals provide a veritable archive for those who know how to read them.

Funereal mask of the «lady of Tanekhatis», showing the importance attributed to cosmetics.
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Knowledge gleaned from the crystals

In the early 20th century A. Gayet discovered objects in the tombs of Antinopolis dating from the third to the fifth century AD. The findings indicated the burial chamber of two women, a «prophetess» and the singer Khelmis. The evidence was provided by the material from the tomb and an examination of the crystals in the remnants yielded information on the women's daily lifestyle, customs and environment.

Objects of science and memory

It is thus that **our cultural heritage**, analysed, authenticated, deciphered and dated, **becomes an object of science and memory**. Ancient sites arouse tremendous excitement and curiosity in visitors, for we can now imagine how these ancient Egyptians went about their daily lives, including details on their personal hygiene and use of cosmetics.

The X-ray radiography of these Egyptian bottles reveals cosmetic residues.
Source : LC2RMF-CNRS
Le Louvre

Natural mineral deposits of lead such as galena were exploited in Egypt, most notably in the «Mountain of oil» « *Gebel el-zeit* ».
Source : LC2RMF-CNRS
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Woman's breastplate
A high number of funerary objects, as well as artefacts used in daily life and personal hygiene, were found in Egyptian tombs under the Roman Empire. The crystals in these materials have been analyzed by scientists using X-ray, neutron and electron beams. These studies, together with the findings of archaeologists, enhance our understanding of how they were made and used.
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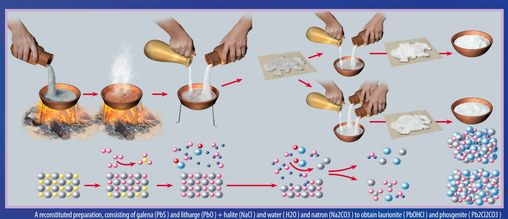

A reconstituted preparation, consisting of galena (PbS) and litharge (PbO) + halite ($NaCl$) and water ($H2O$) and natron ($Na2CO3$) to obtain laurionite ($PbOHCl$) and phosgenite ($Pb2Cl2CO3$)
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