

was a tidal-flat complex. An evaporitic depositional environment is also suggested for the uppermost members of the sequence, where secondary limestones in great portion occur. Evidence of volcanic action (tuffites?) exist in rare places (units E and H). Finally the dark carbonaceous dolomitic facies which is present at the lower part of the sequence is probably overturned.

## **LIBRARY - GeoBASE AN APPLICATION OF SOFTWARE FOR RECORDING BIBLIOGRAPHIC REFERENCES**

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The LIBRARY - GeoBASE is an application of software, based on the technology of the Relational Data Base Management Systems (RDBMS), with a very friendly user interface in order to provide to the geologists a very useful, and powerful tool for the filing of the bibliographic references which they use.

The program runs on IBM personal computers and compatibles with minimum memory (RAM) 640 Kb, hard disk, and MS-DOS 3.2 or higher as operating system.

The application offers easy retrieval of data from the Database that meets a variety of criteria. The results of the searching in the Database can be: a) displayed on the screen of the computer, b) printed with a printer, c) stored as an ASCII file on the hard disk of the computer in order to be further edited with a Word Processor.

The program offers the capability to the researchers, who use it, to interchange bibliographic digital data in an easy and fast way.

## **JAROSITE: AN IMPORTANT MINERAL FOR PROSPECTION AND EXPLORATION OF SILVER AND GOLD IN GREECE**

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The mineralogical composition of the jarosite occurrences in Greece, its contents in gold and silver and the importance of this mineral for prospection of precious metals is studied for the first time. This systematic investigation for the Pb-Zn and Fe-ores of Sifnos, Euboea and Thasos islands, Palea Kavala area as well as Fterouda and Axantas areas in Chalkidiki, has revealed important mineralogical and geochemical results.

The higher contents in silver has been found in argento- and plumbojarosite and are 4,600 g/t. The size of the silver and silverbearing minerals are 2 $\mu$ m to 0,8mm and this minerals are: native silver, argentite, jalpaite, proustite, pyrrargirite, fahlore and freibergite. The higher contents in gold of jarosite are 8,5 g/t and the size of the gold grains ranges from 2 $\mu$ m to 100 $\mu$ m.

This systematic investigation revealed that jarosite is precious metal carrier and for this reasons it can be considered as "indicator" for gold and silver concentrations of economically importance in Greece.

## **CHANGES OF THE GOLD GRAINS MORPHOLOGY DURING THEIR DOWNSTREAM TRANSPORT: THE GALLIKOS PLACER EXAMPLE (NORTHERN GREECE)**

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This study of gold grains sampled in the Gallikos area shows how gold grains evolved in a fluvial placer. The morphology of the grains changes progressively during their downstream transport and is influenced by various including character of the original lode grains, distance of transport, chemistry of water, streams energetics and time spent in the stream. In the present work 355 gold particles (26% gold grains and 74% gold flakes) from the Gallikos area have been investigated to indentify the morphological features of the gold grains and the relationships between grain morphologies and surface textures.

## **STRUCTURE PETROPHYSICAL CHARACTERISTICS OF ZVEZDEL - PCHELOJAD ORE FIELD (EASTERN RHODOPE)**

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The Zvezdel - Pchelohjad ore field is situated at the southern margin of the Momchilgrad graben - syncline, a part of the Eastern Rhodopean paleogene sink. The ore field is hydrothermal, polymetal and vein type. The conducted investigation aimed at acquiring of information about the petrophysical properties of rocks and their influence upon ore formation.