

## **The akrotopege “Barbarabad”, Carinthia, Austria**

Pertlik F.

*Institut für Mineralogie und Kristallographie, Universität Wien, Geozentrum, Althanstraße 14, A-1090 Wien, Austria. franz.pertlik@univie.ac.at*

The history of a mineral spring, with historical data, chemical analyses and references to literature is the topic of this article. The history of this spring with a water temperature below mean yearly surface temperature but with a pronounced mineralization goes back to the late 15<sup>th</sup> century. Already in the year 1506 the spring was called mineral spring (Heilquelle) and dedicated to holy Barbara. In the following centuries a lot of legends were told in combination with the therapeutic power of the water.

The first chemical analysis of the water was performed by Crantz and semi quantitative values for the content of calcium- and magnesium- sulphates were published by this author. The range of therapeutic applications varies from dermatologic diseases up to rheumatism in this time.

Accurate chemical analyses were given by Mitteregger and explicitly written: “In 10 000 G. T. ist enthalten: Abdampfrückstand 2,70 G. T. [Gewichtsteile]. Aus dieser Analyse ist zu ersehen, dass dieses Wasser zu den indifferenten kalten Gebirgsquellen zu rechnen ist.” “In the 19<sup>th</sup> and in the first five decades of the 20<sup>th</sup> century the spring and the bath had an excellent reputation, after this time the owner ruined the whole buildings by bad management”. Nowadays no access to the spring and the environmental buildings is possible.

Perhaps by some relevant articles we can wake up this jewel to reality. Especially, while today the “originality” in all spheres of our life is of predominant interest.

## **On a comparison of olistostromes and olistoliths from the Cilento Flysch in the Southern Apennines (Italy) and the Northern Carpathians (Poland, Slovakia)**

Pescatore T.<sup>1</sup>, Senatore M.R.<sup>1</sup>, Cieszkowski M.<sup>2</sup>, Ślaczka A.<sup>2</sup> and Potfaj M.<sup>3</sup>

<sup>1</sup>*Department of Geology and Environment, University of Sannio, Benevento, Italy, senatore@unisannio.it*

<sup>2</sup>*Institute of Geological Sciences, Jagiellonian University, Kraków, Poland, mark@ing.uj.edu.pl, slaczka@ing.uj.edu.pl*

<sup>3</sup>*Dionyz Stur Institute of Geology, Bratislava, Slovakia, michal.potfaj@geology.sk*

Comparative studies show significant analogies of geodynamic stages between the S Apennines and the N Carpathians as well as analogies of occurrence of similar levels with olistoliths and olistostromes related to these stages. One of the periods with extensive development of olistoliths and olistostromes was related in both orogenes to the final geodynamic stage when internal margin of sedimentary basins as well as adjacent accretionary prism started to be extensively uplifted and overthrust onto their foreland. The redeposited blocks and olistoliths are of shallow water sediments and their adjoined basement of various ages. These have been derived from the internal margin of the basin as well as from older basin sediments transformed already into accretionary prism. In the Cilento Flysch unit (S Apennines) a level of chaotic deposits developed during Paleogene and/or Neogene. It crops out along coastal cliff at Tempa Rossa within the Cannichio Formation (Monte Stella Succession) where debris-flows rich of mudstone and sandstone clasts or olistoliths and sandstone layers folded and mixed together by submarine slumping are visible. They are partly similar to deposits of an olistostrome within the Hieroglyphic Beds (Silesian Nappe, Carpathians), which crops out along a shore of the Rožnów Lake.

In the Monte Sacro Succession (S Apennines) two large olistostromes occur within the Miocene San Mauro Formation. The upper one, about 100 m thick, includes large olistoliths (olistoplaques) of Late Cretaceous red shales. Comparable to it is an olistostrome within the Bystrica Subunit of the Magura Nappe by Rabka village (Polish Carpathians) that is built up of debris-flows, sandstone blocks and olistoliths of Eocene red shales. In both cases very