

The authors gratefully acknowledge the approval of the Ministry of Economy of the Czech Republic to publish the results of the older exploration works financed from the state budget. The approval to open the results to the public and to visit individual deposits was kindly provided by the companies which recently own the exploration licences – RTZ Mining and Exploration (Mokrsko), Greenwich Resources (Petráčkova hora Mt. near Vacíkov) and TVX Gold-Bohemia důlní (Kašperské Hory).

# **GOLD DEPOSITS IN BOHEMIA**

Edited by  
Petr Morávek

With contributions from  
P. Morávek, Z. Pertold, M. Punčochář, B. Studničná & J. Zachariáš

Photos on the cover:

Primary gold from Jílové u Prahy  
Placer gold from Golčův Jeníkov

On endpapers:

A part of the metallogenic map of gold in the Bohemian Massif  
A map of gold workings at Žampach near Jílové (1730)

Published by the Czech Geological Survey  
Prague 1996

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### Gold deposits in Bohemia

Editor: Petr Morávek

Authors: P. Morávek, Z. Pertold, M. Punčochář, B. Studničná, J. Zachariáš

Technical Editor: Jaroslav Aichler

Modified from the Excursion Guide by P. Morávek, ed., Gold deposits of the central and SW part of the Bohemian Massif published for the excursion of the Third Biennial SGA Symposium "Mineral Deposits: From Their Origin to Their Environmental Impacts", held in August 28–31, 1995, Prague, Czech Republic.

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Published by the

Publishing Department of the Czech Geological Survey, Prague

Klárov 3, 118 21 Prague 1, Czech Republic

Composition and text processing by Jaroslav Aichler. Figure montage by Miloslav Cihelka.

Second edition

Printed in the Czech Republic

ISBN 80-7075-202-5

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## 1. Outline of the gold metallogeny of the Bohemian Massif

Petr Morávek

### 1.1. Introduction

Over the period of the last fifteen years, extensive exploration and research aimed at gold-bearing ores have been carried out in the Czech part of the Bohemian Massif. The evaluation of the gold potential of the Bohemian Massif, based on both archival and field studies of gold occurrences and regional metallogenic studies, represented one of the most important projects (Morávek et al. 1985). Large amounts of data were yielded by the significant studies of F. Pošepný and J. L. Barvíř from the end of the 19th and beginning of the 20th century. Regional surveys of gold-bearing stratiform formation of the Bohemian Massif (Klomínský et al. 1980) and mainly the results of the panning prospection of the whole territory of the Czech part of the Bohemian Massif (Tenčík et al. 1970, 1982, Albrechtová et al. 1984, Šponar et al. 1985) represented the basic data for regional gold evaluation. The total gold potential of the Czech part of the Bohemian Massif has been evaluated at approximately 400 tons of gold.

Selected gold deposits and promising areas were subsequently explored using geochemical and geophysical methods, drilling and underground workings. Discoveries of some important deposits in new areas (Mokrsko and Petráčkova hora-Vacíkov deposits) and the re-evaluation of some historical gold mining districts (Kašperské Hory, Zlaté Hory a.o.) represent the most important findings of this exploration programme. The gold resources of some new deposits form the basis for the renaissance of gold mining in the Czech Republic. However, this possible future mining must be carried out in accordance with relatively strict legal environmental regulations.

The geochemical and metallogenic studies, simultaneously carried out with this exploration activity, resulted in the new classification of gold-bearing deposits of the Bohemian Massif and in new concepts of the genesis of gold-bearing mineralizations and its distribution in various geological environments (Morávek & Poucha 1987 a.o.). An overview of the current state of knowledge on the gold metallogeny and gold deposits in the Bohemian Massif in the territory of the Czech Republic has been presented in the monography by P. Morávek et al. entitled "Gold in the Bohemian Massif" (1992). Numerous recent papers by Z. Pertold, B. Studničná, J. Zachariáš and others (l.c.) complete the older results and bring new ideas.

This publication is devoted to becoming acquainted with the main gold deposits situated in the central and SW part of the Bohemian Massif, which also represent the main genetic and morphologic types of gold-bearing deposits.

### 1.2. Position of gold in the metallogeny of the Bohemian Massif

The territory of the Czech Republic consists mainly of the geological units of the Bohemian Massif, the marginal parts of which also occupy adjacent areas of Germany, Austria and Poland. In the geological setting of Central Europe, the Bohemian Massif represents the relics of the basement of an Epivariscan platform and a Variscan tectogen which can be divided into three megablocks: Saxothuringian, Bohemian and Sudetian. These blocks, each of different geotectonic development, are separated by major deep-seated faults. The Bohemian megablock with the significant deep-seated Central Bohemian zone separating the highly metamorphosed Moldanubicum and the low-metamorphosed Bohemicum continues as the Moldanubian zone in a westward direction through the Vosges and Schwarzwald to the French Central Massif. Recent opinions on the Variscan and pre-