

This thesis discusses gold deposit types, reviews historical approaches to their classification, and focuses in more detail on modern classification approaches. A new classification of gold deposits is presented, and the orogenic deposit type is described in detail. All important characteristics and features of this deposit type are presented.

The second part of this thesis discusses the geology and mining history of Jílové u Prahy, which historically has been the most important gold-bearing district in the Czech Republic. A number of other, less important gold-bearing areas are located at periphery of this district, but these areas have yet to be geologically studied in detail.

The Radlín and Zahořany gold-bearing areas are studied in detail in this thesis. Structural measurements in these areas are presented, some of which are from outcrops, while others come from several adits that have been preserved to the present day. Geological maps of parts of some these adits are presented, focusing on those that could be useful for deposit type identification. The thesis goes on to discuss gangue samples, which were studied microscopically, with fluid inclusions in quartz also subjected to study.

The final part of the thesis presents a comparison between the orogenic gold deposit type and measured data. However, the data collected as part of this thesis is insufficient to clearly identify the study areas as representing orogenic gold deposits or not. Nevertheless, the collected data do not contradict the classification of these gold-bearing areas as orogenic.