

## SOME DATA OF MINERAL RESOURCES IN SOUTHEASTERN ALBANIA, THE REGIONS KORCE-LIBRAZH D

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Librazhd-Korca region represents significant potential ore deposits, in some of which geological-mining activities are still carried out. Chromium, iron-nickel, copper, are the minerals of economic value in the region.

**Chromium mineralization** is concentrated mostly in the Shebenik-Pogradec ophiolitic massif, but fragmentary outcrops are detected also in ophiolitic massifs of Voskopoja, Vallamara and Morava. The mineralization is distributed in several lithological sequences.

In the fresh harzburgite sequence with rare dunite lenses, we meet podiform chromite mineralizations, for example in section Fushe, Madhe-Gjor duke. This mineralization is relatively poor, in relation to the mineralization found in the upper parts of the cross section, and the size of ore bodies is medium to small. In harzburgite-dunite sequence of the ultrabasic massif cross section, where the presence of the dunitic lenses varies in 10–20%, the main concentrations of chromium ore are placed. In its lower part the deposits of Katjeli, Pojska, Memelisht 4, Guri Pishkashit are situated. A series of other ore concentrations are those of Prenjas, Guri Pishkashit, Pishkash 4 and 5, Varri i Plakes, Poshte Govates, Buzgare, Mollez, Shape. These ore bodies are morphologically pseudo-layers, podiform, and partly folded. The sizes are relatively large. They have normally massive textures and high contents of above 4 wt% Cr<sub>2</sub>O<sub>3</sub>. In the ultrabasic cumulate sequence only a weak mineralisation, in the form of "schlieren" or small bodies occur, but normally without any economic significance.

Also the ophiolitic complexes of the western belt are encountered some occurrences of chromium such as in the Voskopoja ophiolitic complex, in Pasha Tepe and Ura e Verbes Sector. Chemical composition of the Pasha Tepe occurrence is Cr<sub>2</sub>O<sub>3</sub> = 39, Al<sub>2</sub>O<sub>3</sub> = 22.8 and MgO = 16.5 wt%, while the occurrence of the Ura e Verbes results Cr<sub>2</sub>O<sub>3</sub> = 14–30, Al<sub>2</sub>O<sub>3</sub> = 8–17 and MgO = 25–32 wt%. In these deposits, elements of the platinum group can be found. In the studied region this ore formation is encountered only in the Voskopoja ophiolitic complex (Dersnik) where around 7 occurrences are

known with content of Cr<sub>2</sub>O<sub>3</sub> = 22–42 and Al<sub>2</sub>O<sub>3</sub> = 30–35 wt%. They are located in dunitic rocks of upper parts of the ultrabasic cross section.

**Iron-nickel ores** in Southeast Albania: significant reserves of iron-nickel and nickel-silicate ores are located, which have supported the mining activities and utilization of iron-nickel ore for export purposes and for production of steel in the Elbasan Metallurgical Plant. Products of the ancient weathering crust and deposits of iron-nickel and nickel silicate associated with this, are related to ultrabasic rocks of the Mirdita Tectonic Zone. Those ores are formed by the alteration of ultrabasic rocks during various time stages which started during Cretaceous period (in the central region), and pre-Eocene (in the southeastern region). Deposits of iron-nickel ores of the region Librazhd-Pogradec have a very wide spread, extending into two generations, and situated in both (a) northeast side and (b) northwestern side of the Shkumbini River upstream. For example in the Guri i Kuq deposit the true thickness ranges from 1–2 m to 30–40 m. Their values vary from 38.9 to 50 wt% for iron, from 0.8 to 1.11 wt% for nickel and from 0.06 to 0.10 wt% for cobalt.

**Copper ore.** Copper deposits have a considerable spreading in Rehova and Bregu i Geshtenjes, where they are located in a basaltic pillow lava packet. Type mineralization is disseminate (the most of ore bodies), and massive in the deeper levels, near the contact with diabasic basalts (diabase)

Geological reserves are approximately 240,000 ton, belonging to blocks, containing about 1.83 wt% Cu. In the Voskopoja ophiolitic complex and Vithkuq-Rehova allochthonous, this mineralization is located in the volcanic rocks of Shipcke, Lavdar, Polena Vithkuq, Column, Leshnje areas, and is represented by a quartz-pyrite-chalcopyrite mineralization type, often in the form of veins with limited size (2–10 m in length and 1–2 m of thickness), with Cu content = 0.52 wt%, Zn = 0.7 wt% and Au = 0.33 g/t. Mineralization is located between brecciated diabases and amygdaloidal basalts.