

# **GEOLOGY OF LATE MESOZOIC DEPOSITS OF MONGOLIA**

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The occurrences and deposits of Late Mesozoic period of Mongolia are characterized mainly by mineralization of base metal such as lead-zinc, tin, tungsten, gold and uranium and REE. Mineral deposits of this period related to magmatic- hydrothermal system of shoshonite-latite series. Shoshonite- latite series of Late Mesozoic appears in ring structure at the intersection of deep faults, mainly with NE and NW direction. The definite structures with lead zinc mineralization are consisted by combination of effusive, hypabyssal and subvolcanic facies of shoshonite latite series. The composition effusive rocks are ranged in shoshonite, latite, quartz latite, andesite dacite rhyolite including ignimbrite, high potassium rhyolite and volcano-pyroclastic rocks. The hypabyssal and subvolcanic rocks are accompanied with monzodiorite, syenite, granite and granodiorite. The hydrothermal-metasomatic alteration is propylitization and beresitization. Propylitization is represented by mineral association of actinolite, epidote and chlorite. Ore bodies are represented by vein rarely pipe type. The ore veins extend northwestward. This direction controlled by beresitization. The ore veins for lead-zinc deposits consist of quartz-galena-sphalerite and carbonate-galena-sphalerite. The structure consisting mainly of hypabyssal facies of latite series followed the veins with tin and tungsten mineralization. The uranium deposit is confined to structure, consisting mainly of effusive facies. They are acidic lava and clastolava. The REE mineralization is confined to structure following carbonatite bodies. The silicification and sericitization wall rock alteration are typical for epithermal gold mineralization. The ore bearing structures are observed within Late Mesozoic volcanic belt which form of process continental rift.