

THE SULPHURIC INTERCEPTION IN GENESIS OF MAGMATIC SULPHIDE DEPOSITS

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The behaviour of elementary sulphur is not taken into account in the existing concepts of sulphide magmatic ores forming. As a rule the behaviour of sulphur only in gaseous and remiss state in magmatic melt is analyzed. As sulphur's critical temperature of 1040 C is finding oneself in the temperature interval of possible magmas existence, there should exist a zone or a system of zones of liquid sulphur on the way of gases movement. Liquid sulphur is located in the zone along the way of moving gases in the shape of concentrations of drops and the thin-film infill of cracks. This sulphur liquation's zones present itself powerful geochemical barriers for capture and accumulation of metals, transported by magmatic gases. During of metals accumulation the density of the sulphuric liquid grows, and it begins migrating into lower-lying horizons of magma, where it occurs thermal separation of sulphur-sulphide liquid drops into pure elementary sulphur, which is turned into gaseous condition and comes back into the liquation zone and pure sulphide melt. In our opinion gravitational-stratiform deposits of ingraind ores in magmatic sulphide fields can be formed thus. Accumulative in bottoms magmatic chambers the sulphide melt remains in liquid state long after full crystallization of surrounding rocks. It condition on high mobility of sulphide melt and its ability to injecting. The most relevant type of massive sulphide ores can be formed thus. Exactly such specificity is typical to many magmatic sulphide deposits of Ural and Siberia, Russia.