

**ORE MINERALOGY AND GEOCHEMISTRY OF SULPHIDE
OCCURRENCES IN POTIN AREA OF SUBANSIRI DISTRICT,
ARUNACHAL PRADESH, NE INDIA**

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Abstract

Sulphide mineralization localized in a shear zone and adjacent lithounits occupying about 1.5km² near the Potin area of Subansiri district, Arunachal Pradesh has been reappraised. The mineralization is both structurally and lithologically controlled. Structural elements include shear fractures and foliations; lithological variants are either garnetiferous quartz-biotite-schists or garnetiferous sericite-chlorite-schists. Chalcopyrite and pyrrhotite with minor quantities of sphalerite, occasional arsenopyrite and schlieren pyrites are the major ore constituents observed. Comprehensive ore textural and EPMA analyses of dominating mineral species of constituent host rock minerals like garnet, biotite and sulphides viz., chalcopyrite, pyrrhotite and sphalerite have been evaluated. A monotonous nature of ore mineralogy with considerable variations in major element composition of constituent sulphides is depicted.

Keywords: Sulphide mineralization, Potin Area, Shear zone, Structural and lithological control, EPMA.