

MICROBIAL STRUCTURES IN FABRIC OF BAUXITES FROM SOME SIBERIAN DEPOSITS, RUSSIA

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The samples of Paleosoic bauxites were selected from Southern Siberia and haveinverted in nonetching state by microscope Cam-Scan-4 in Paleontological Institute. The structures of these granular bauxites are typical pisolitic.Pisolites are (0,3-0,5) in size (the greatest are up to 1 sm),and cemented by homogenous, or show taking shape concentric lamination structure. To sum up of this investigation we may conclude that in matrix of the ores there are mass congestion of different microbial forms:1)coccoidal (3-15mcm)in size; 2)knot of filaments, 1-2 mcm in diameter and up to 100 cm lengthwise; 3) separated filaments, more then 40 mcm lengthwise with restrictions along its length as cone-in-cone type; 4)curved rod-like forms, up to 15 mcm lengthwise and up to 3 mcm in diameter. By microbe analyses was established similarities between composition of these microbial formation and composition of matrix and pisolites. It is alumina with partly increase role of oxidation in the conqestion of microbial forms. The inner structure of pisolites is defined hardly. It is possible to observe subtle concentricly zonal, oncolite like structure of the ore matrix is altered in diagenesis transformations to cristalline aggregate of diaspore. Thus we have reasons to suppose that in origin of these bauxites play an important part microbial action as occlusion.