

## **TRAPP BASALTS AS A PRODUCT OF THE GLOBAL BASIFICATION OF ROCKS**

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The author studied a trapp sequence in the Noril'sk area located in the north of the great Tunguska trapp province. The sequence studied is presented by the upper and lower basalt covers separated by a 40-meter finely bedded sediments. These are known to be classified as tuffstone deposited in a shallow paleo-basin. Our studies demonstrated that plagioclase and pyroxene neoforms are developed in tuffstone. The neoforms are constituents of a typical major mineral basalt assemblage: plagioclase-pyroxene-(chlorite, carbonates, zeolites). Neoforms of 'magmatic' minerals were first described by Lori (1861) and, later, by Zemyatchensky, Chervinsky, Baturin, Pustovalov, Shvetsov, etc. The proportion of the newly-formed plagioclase-pyroxene assemblage increases towards the contacts with the basalt covers. In other words, a previously unknown process of cold basaltization is established in a sedimentary member. Studies of the near-contact zones in the sedimentary members and the basalts demonstrated that the sediment passes gradually into basalt. Sedimentary minerals that constitute tuffstone and sandstone are replaced by the newly-formed supergenic assemblage, plagioclase-pyroxene-(chlorite, carbonates, zeolites). The shadow sedimentary texture remains preserved. The transitional zone varies in thickness from 10 to 100 cm. It is demonstrated that chlorite, zeolite, and other minerals practically omnipresent in the basalt covers are not secondary, but are syngenetic to pyroxene and plagioclase. This fact negates the melt origin of the trapp basalts.