The rare phyllosilicate of Mn-parsettensite has been found at Kyzil-Tash manganosite ore deposit (the South Urals) in association with rhodonite, calcite, quartz, caryopilite and manganaxinite. The most widespread forms of parsettensite segregations are thin-grained, tangled fibrous, radiating aggregates. Color of the mineral is brown in sample, in thin sectin — with distinct pleochroism: $N_t$ — brown, $N_p$ — light-yellow. Clear cleavage; direct extinction, $n_x = 1.576$ (3), $n_p = 1.546$ (3), $n_g - n_p = 0.030$ (6), $-2V = 12—15^\circ$. Characteristic peculiarity of the studied parsettensite is the presence in its X-ray powder pattern of two very intensive peaks with interplanar distances $d = 12.52$ and 12.08. Diffractograms of this mineral from other deposits have only one intensive peak in
the narrow and le field with $d = 12.60 \text{ Å}$. The study has shown that both two above mentioned peaks belong most probably to the parsettensite. By the way, the symmetry of the mineral crystal lattice has to be described by the model of $C$-unit cell with the monoclinic angle $\beta = 120^\circ$. The unit cell parameters of the studied mineral are as following: $a = 39.53 \ (9)$, $b = 22.783 \ (2)$, $c = 14.65 \ (3)$, $\beta = 121.5^\circ \ (1)$. The mean chemical composition of the mineral (wt %): $\text{SiO}_2 \ 41.01$, $\text{Al}_2\text{O}_3 \ 4.04$, $\text{FeO}_{6\text{Mn}} \ 2.59$, $\text{MnO} \ 31.76$, $\text{MgO} \ 1.73$, $\text{CaO} \ 0.42$, $\text{BaO} \ 1.07$, $\text{K}_2\text{O} \ 3.99$, the sum 86.61. Presence of Ba in quantity from 0.7 up to 1.25 % is the South Urals parsettensite peculiarity also. The main features of its constitution correspond to the following crystallochemical formula: $\text{KMn}_7[(\text{Si}_9\text{Al})_{10}\text{O}_{24}(\text{OH})_6] \cdot n\text{H}_2\text{O}$.