



PETROGRAPHIC CHARACTERISTICS OF THE ROCKS OF THE KUNSHIN
AREA

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Scientific supervisor: Ph.D. geol.-mineral. Sciences, Associate Professor, N.I. TSU The results of
practical training at the Tomsk State Research University carrying out site work on Kunshin Square are
presented.

Based on petrographic studies carried out on stone material selected during geological routes, 5 petrographic groups were identified. Within the Kunsha area, the predominant rocks are the volcanogenic-sedimentary strata of the Makarovsko-Oresh complex and the accompanying subvolcanic bodies of basic to acidic composition. There are also acidic and intermediate volcanic rocks of the Kuzhebazinsky series and granosyenites of the Kuksha massif.

Key words: Kunshinskaya area, granitoid, plagioclase, quartz, Makarovsko-Oreshksky complex.

Granitoids. Microscopically, the rocks have a hypidiomorphic structure, with a sharp ideomorphism of plagioclase, over potassium feldspar, as well as the development of micropegmatite structures. The mineral composition is represented by: Plagioclase (35-40%), potassium feldspar (15-20%), quartz (15-20%), biotite (10-15%). Secondary minerals: epidote, sericite (up to 5%).

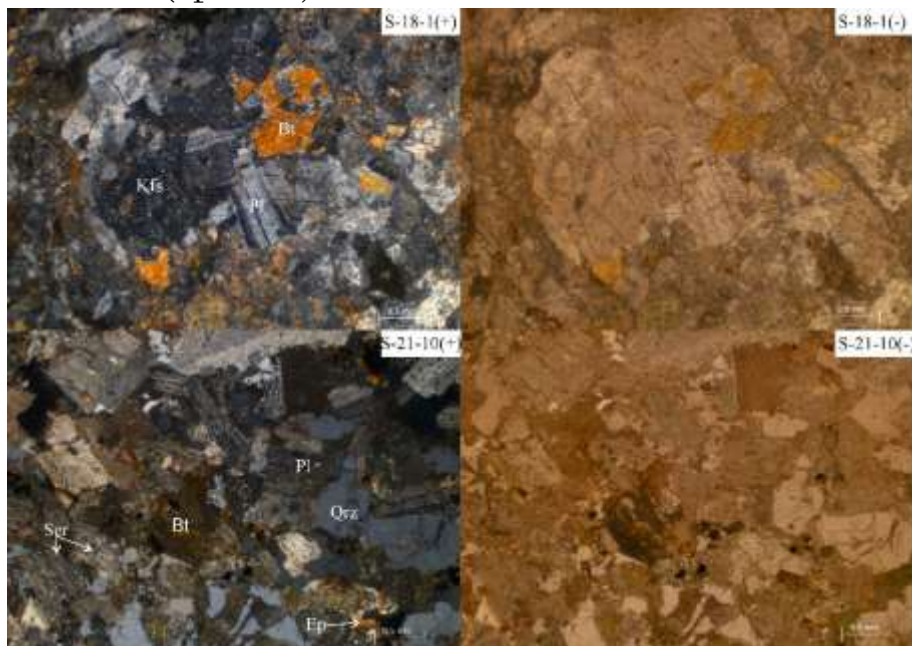


Figure 1 – Granitoids with a hypidiomorphic structure. . Pl – plagioclase, Qrz – quartz, Kfs – potassium feldspar, Bt – biotite, Ep – epidote, Ser – sericite. (+) - with analyzer, (-) - without analyzer.

Tectonites. The most common tectonites in the area are serpentinites. However, locally tectonized rocks are observed in isolation from the main melange. In such rocks, crushing structures are intensively developed; structures of replacement by aggregates are less often observed. Mineral composition: Serpentine (0-90%), plagioclase (0 – 40%), quartz (0 – 25%), chlorite-sericite (up to 35%).

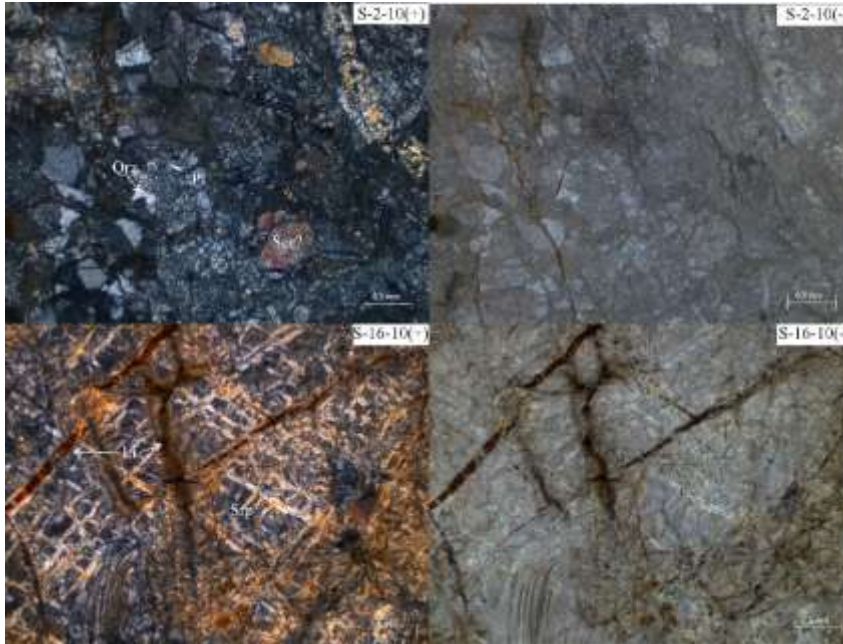


Figure 2 – Tectonites. S-2-10 – tectonic breccia based on diorite porphyry, S-16-10 – serpentinite. Qrz – quartz, Pl – plagioclase, Ser? – sericite, Srp – serpentine, Li – limonite. (+) – with analyzer, (-) – without analyzer

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