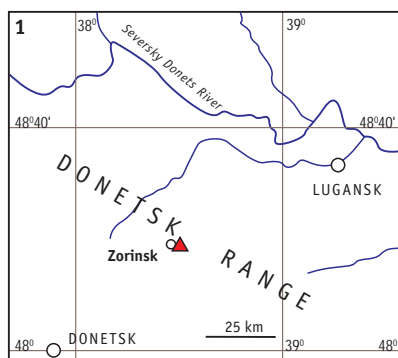


SKELETAL CRYSTALS OF QUARTZ FROM THE LUGANSK OBLAST

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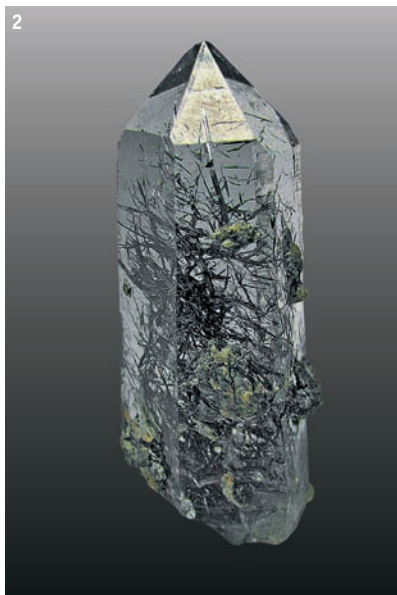
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1. Geographical location of the locality near Zorinsk town.

Photo: Mikhail M. Bitman

2. Quartz with inclusions of *boulangerite*. Height 4 cm. Esaul deposit, Nagolny Ridge, Lugansk Oblast. Specimen: Mikhail M. Bitman.



Recently, I thought that we knew all about the mineralogy of the Donbass, in particular the Lugansk Oblast. It is here that there are occurrences in the Nagolny Ridge with the numerous quartz veins, where cavities containing magnificent long-prismatic crystals of the purest rock crystal can be opened and quartz penetrated by boulangerite needles may be found in dumps of old dug pits (Fig. 2). However, new bright findings may be done in the Donbass territory, which is well documented concerning geology and has been passed up and down.

In May of 2016 Oleg Krisak, a researcher in the Geology Department, Donetsk National Technical University, showed me specimens of quartz; excellent skeletal crystals, unusual samples of beautiful smoky quartz, and “marmarosh diamonds” (Figs. 3, 4).

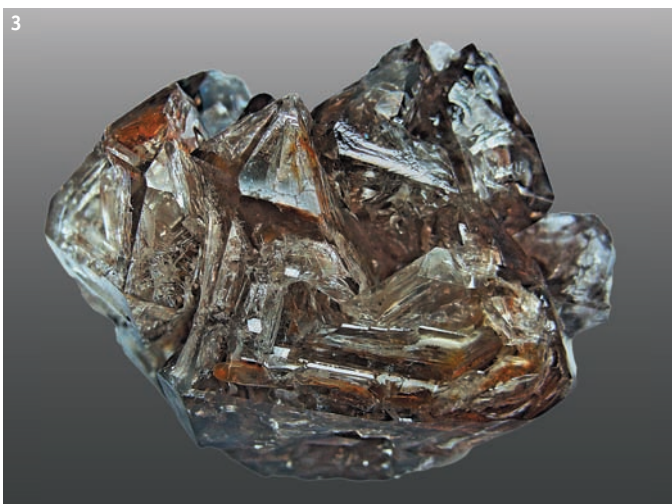
These specimens had no detailed geographical address. They came from the vicinity of the town of Zorinsk in the Perevalsk district, Lugansk Oblast. Oleg, interested in geology since childhood, studied all of the surrounding outcrops and small quarries of building material and coal mines. The hobby gradually developed into a profession and perseverance, experience and knowledge allowed him to make interesting findings.

In April of 2017, we undertook two missions to the vicinity of the town of Zorinsk. The first coincided with the Geologist Day, it started our field work and was reconnaissance. Luck was with us three weeks later during on the second mission (Fig. 5).

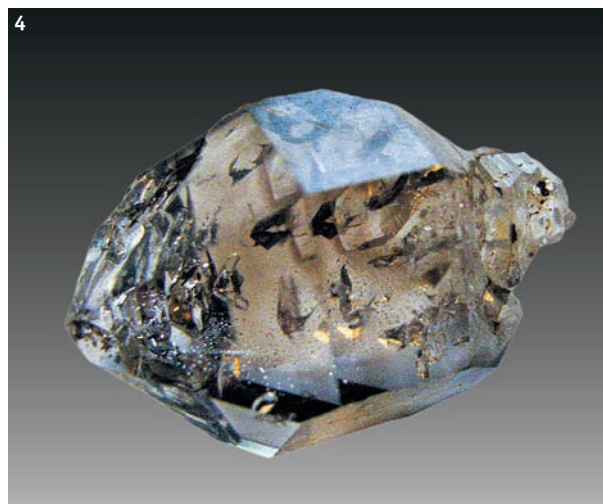
When we passed through a copse decorated with spring flowers and in a steppe location with wild crocuses, adonises, violets and peonies, pleasing to the eye, we came to an abandoned quarry where locals mined sandstone (Fig. 6).

Here, loose quartz crystals in a placer were found in the a near-surface bed immediately below the top soil. We wanted to find their primary occurrence. With of hard work some interesting specimens were found, but nothing else. We relocated some kilometers away another quarry. Here, the host rock is the Moscovian limestone penetrated by carbonate veins. Rather large quartz crystals ideal in shape, bright “marmarosh diamonds”, transparent with a strong luster, double-terminated shortened free-grown quartz crystals occur among flattened “calcite leaves”. This quartz could be named “Donbass diamond” after its locality (Fig. 7).

Note that it is not the only occurrence of such quartz hosted in coal sequences of the Donetsk basin. Similar crystals were previously found at various mines in the Donetsk Oblast and Lugansk Oblast.



3. Cluster of skeletal **quartz** crystals. Width 4.5 cm. Vicinity of Zorinsk town, Perevalsk district, Lugansk Oblast. Specimen: Oleg S. Krisak.



4. **Quartz** "marmarosh Diamond". Length 1 cm. Vicinity of Zorinsk town. Specimen: Oleg S. Krisak.



5. Donbass steppe.



6. Steppe location near quartz placer, April, 2017.