To Munich Mineral Show-2014 Meteorites!

THE NEW FINDS OF KUNASHAK METEORITE

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eteorite stories are increasingly becoming the news on the first pages. New events such as the fall of Chelyabinsk meteorite, inspire people to search when the of meteorite fall occurs. For decades, long forgotten theme of "space aliens" has again become a burning issue. Findings of new meteorites are noted throughout Russia. Those new findings can be attributed to meteorites that known fall previously. This is the result of a more thorough exploration and application of the latest technology. Among people who found meteorites are more enthusiastic meteorite amateurs rather then professionals. The experience gained in search of meteorites at the Chelyabinsk "polygon" from village Etkul up to town Chebarkul (this is the territory larger than 80 km!) gave its results. In Kunashak district of the Chelyabinsk region this summer for the first time was discovered meteorite since 1960.

The fall of a stone meteorite rain Kunashak was recorded on June 11, 1949 at 8.10 am. Then were collected about 20 fragments and individual bodies weighing up to 200 kg. Among small noted individuals with a weight of 119 grams



The Kunashak **Meteorite**. Weight 2 527 grams. The surroundings of the village Kunashak, Chelyabinsk region, South Urals, Russia. Fall June 11, 1946, found in summer, 2014. Private collection. Photo: S.V. Kolisnichenko. The Kunashak **Meteorite**. Plate. 11 x 8 cm. The Surroundings of the village Kunashak, Chelyabinsk region, South Urals, Russia. Fall June 11, 1946. Specimen: Central Geological Museum of SB RAS, Novosibirsk. Photo: S.V. Kolisnichenko.



175 grams, 800 grams, 2 kg, 2.5 kg, and among large recorded meteorites weighing 36, 40, 120 kg. Meteorites are rounded and elongated, rounded with a rough surface or a spherical shape. Typical light surface with sparse remnants of the black crust melting. The meteorite is a chondrite type L6.

The more interesting is the latest discovery of Kunashak meteorite in the summer of 2014. A group of young enthusiasts from Chelyabinsk within 7 days has performed a search of plot in the middle of the ellipse fall - in area East of lake Kainkul. On the fifth day they discovered an individual meteorite weighing 2.5 kg!

Meteorite was lying on the surface of mowing (haymaking). He was visually observed from a close distance. The area had a bit hilly relief. Low grassy vegetation due to the dry summer allowed a good view of the neighborhood. The original traces of its impact with the ground were not found.

For example, a similar meteorite weighing 2.5 kg discovered in 1949 was in a hole with a diameter of 16 cm and a depth of 15 cm. In our case, we can assume that he fall and hit the ground and bounced off. That scenario was the same in 1949 for individual meteorite weighing 0.7 kg, which rebounded from the crash site of one meter.

The meteorite which was found this summer has a rounded triangular flattened shape. Size $16 \times 14 \times 8$ cm. Weight is 2.547 kg. Melting crust is visible in places and has a small surface area. It is black. The chondrite is covered with brown spots from hydroxides of iron, but sometimes also seen its light gray color. At one spot there is trace from the cleavage area of no more than 2.5×3 cm. Generally, the meteorite has quite a beautiful body.

This meteorite discovery of long past event (this was 65 years ago), allows us to look enthusiastically at the searches for such kind. Thereby, it is possible to replenish private and museum collections of meteorites, as well as to look forward to their full of modern study.

In Russian museums are stored 18 samples of the meteorite Kunashak. Two specimens were lost in the Museum of the Chelyabinsk State Pedagogical University and in Chelyabinsk State Museum of local history. Till present time, the discovery of 2014 is the largest that is stored in the Urals.

The author is grateful to the owners of the meteorite for the opportunity to explore the findings.

References

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