

## NEW FINDINGS AT THE RUBTSOVSKOE DEPOSIT

All specimens:  
Rubtsovskoe deposit, Altai, Russia.  
Photo: Michael B. Leybov

Early in 2011, a special issue of Mineralogical Almanac was devoted to the impressive rich and unusual mineralization which occurred in the oxidized zone of the Rubtsovskoe base-metal deposit, Northwestern Altai. However, the mineralogical study of this wonderful deposit is not finished. The Rubtsovskoe mine is still operative and for six months new interesting findings have been discovered there. For example, in the western part of the orebody, a few large pods with crystals of cuprite (photos 2, 3) and dendrites of native copper, its nice pseudomorphs after cuprite, and native silver (photo 1) were encountered. These pods provided many notable specimens, but in general they added little to the understanding of the composition of the Rubtsovskoe oxidized ores, the morphology and size of crystals, the ontogeny, and the processes of formation and alteration of the minerals.

This brief report describes spectacular specimens of malachite for the first time. Previous specimens of this mineral from the Rubtsovskoe deposit are not outstanding; it was found as thin films, massive aggregates with azurite, fine-crystalline crusts, and small unpretentious concretions. In 2011, lustrous bright green to dark green



Photo 1. **Cuprite** crystal cluster with native silver, 3.0 x 2.5 cm

## NEW FINDINGS OF MINERALS IN THE MOSCOW REGION

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**W**e like to remember the words of Victor I. Stepanov, one of the greatest Russian mineralogists and outstanding collectors: “despite the great extent of investigation, the Moscow region is an uncharted area on the Russian mineralogical map.” This was said a few decades ago, however, there were few changes since that time; the Moscow region is poorly documented with respect to mineralogy. Therefore, we think that the description of new findings of minerals in this region will be interesting.

V.G. Feklichev (1998) gave the most complete review of the minerals of the Moscow region. The author noted about 70 minerals. However, if we exclude minerals brought from Fennoscandia by the last glaciations, substances not now considered mineral species according to modern thinking, anthropogenic segregations, and minerals described from drill cores, only about 40 minerals are on the list. Three minerals, which are novel in the Moscow region, are described below. They were found in the summer of 2010 and examined at the Fersman Mineralogical Museum, Russian Academy of Sciences laboratory.

### **Aluminocopiapite and epsomite: quarry near village of Konyashino**

One of the most popular field trips during the training of students from Moscow State Geological Exploration University in the Moscow region occurs in the quarry located near village of Konyashino, north of the Gzhel railway station. Clays required for the local brickworks are mined in this quarry. Varied sediments of the Carboniferous shallow sea are observed here: variegated montmorillonite clay, biogenic dolomitized limestone, and chemical dolomite. The sediments of the Jurassic rivers incised in the



1. **Epsomite** (white) and **aluminocopiapite** (greenish yellow under arrow) at the pit edge, near the village of Konyashino