CHALCOCITE: Chalcocite, or copper sulfide, is a secondary mineral that forms mainly below the oxidation zones of copper deposits. It is a major ore of copper and is collected for the rarity of its crystals, metallic luster, and subtle, blue-purple iridescence.

CHALCOCITE

HISTORY, NAME, LOCALITIES: Chalcocite, pronounced KAL-co-site, has served as an important ore of copper since antiquity. Its name is derived from the Greek chalkos, meaning “copper.” Chalcocite was recognized as a mineral species in 1832 and originally named “chalcosine.” Its current name was assigned in 1868. Notable collecting localities are found in England, Chile, Peru, Mexico, Australia, Namibia, China, Russia, Germany, and the United States (Arizona, New Mexico, Utah, Colorado, Montana, New Jersey, and Connecticut).

MINERALOGY, PROPERTIES, OCCURRENCE: Chalcosite [copper sulfide, Cu$_2$S] crystallizes in the monoclinic system as thick, tabular or bladed crystals with striations or deep grooves on one face. Crystals are rare; chalcocite usually occurs in massive form or as coatings. It has a Mohs hardness of 2.5-3.0, poor cleavage in one direction, a metallic luster, and a very high specific gravity of 5.5-5.8. It is dark gray to black and often exhibits a subtle, blue-purple iridescence. Chalcocite forms primarily as a secondary mineral through supergene enrichment below the oxidation zone; lesser amounts form in metal-rich hydrothermal veins and basaltic rocks.

METAPHYSICAL PROPERTIES, LORE, USES: Chalcocite is a major ore of copper. Containing 79 percent copper by weight, it is the most profitable of all copper ores. Probably because it rarely forms crystals, chalcocite is one of the few common minerals that is not assigned metaphysical significance.

COLLECTORS’ INFORMATION: Collectors value chalcocite for the rarity of its crystals, metallic luster, and subtle blue-purple iridescence.