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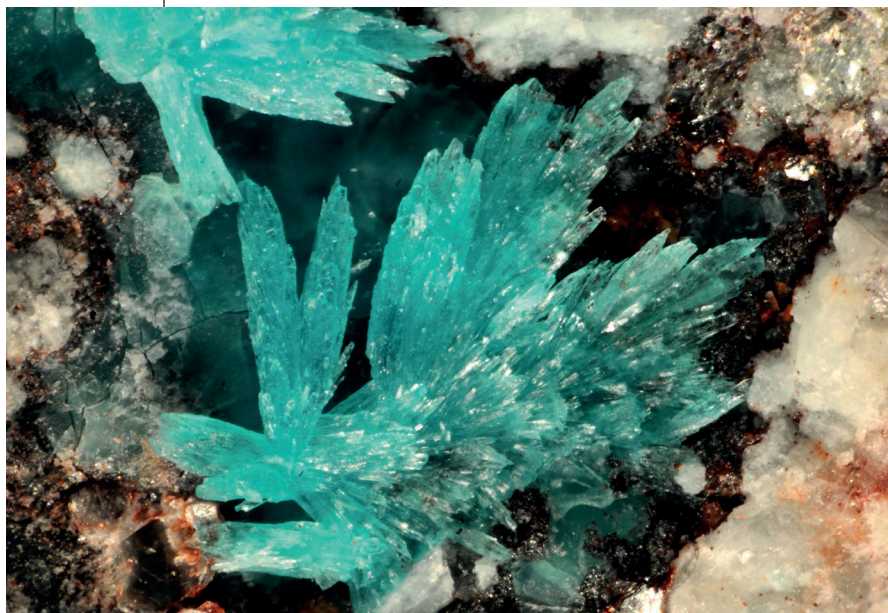
The “Mineral of the Year” is an IMA initiative launched in 2014 that awards the best new mineral described in a given Solar year, no matter the year in which that mineral was found and approved. For 2022, the “Mineral of the Year” award has been assigned to **lazaraskeite**. This mineral was discovered in Oro Valley, north of Tucson, Pima County, Arizona, USA. Lazaraskeite was found and fully characterized by a research team led by Hexiong Yang from the Department of Geosciences, at the University of Arizona, USA.



FIGURE 1 Greenish-blue prismatic crystals of lazaraskeite (polytype M_1). Field of view: 3 mm. PHOTO: RON GIBBS.

More precisely, lazaraskeite was found on the western end of Pusch Ridge at the high elevation (975 m) of the Santa Catalina Mountains, where it occurs as individual crystals of up to $0.2 \times 0.2 \times 0.8 \text{ mm}^3$ or as aggregates. Crystals have a greenish blue color and are transparent (FIGS. 1 and 2). Associated minerals are chrysocolla, malachite, wulfenite, mimetite, hydroxylpyromorphite, hematite, microcline, muscovite, and quartz.

FIGURE 2 Greenish-blue prismatic crystals of lazaraskeite (polytype M_2), associated with chrysocolla, muscovite, orthoclase, calcite, and quartz. PHOTO: WARREN G. LAZAR.



The ideal chemical formula of lazaraskeite is $\text{Cu}(\text{C}_2\text{H}_3\text{O}_3)_2$. Therefore, it represents the first known example of an organic mineral containing glycolate. Shortly thereafter, three other glycolate minerals from the same locality were discovered and described: stanvevansite, jimkriegite, and lianbinite.

Lazaraskeite is monoclinic. Two distinct polytypes occur that exhibit the same space group, $P2_1/n$, but different yet related structures. Lazaraskeite- M_1 has unit cell parameters of $a = 5.1049(2) \text{ \AA}$, $b = 8.6742(4) \text{ \AA}$, $c = 7.7566(3) \text{ \AA}$, and $\beta = 106.834(2)^\circ$, whereas those of lazaraskeite- M_2 are $a = 5.1977(3) \text{ \AA}$, $b = 7.4338(4) \text{ \AA}$, $c = 8.8091(4) \text{ \AA}$, and $\beta = 101.418(2)^\circ$. The crystal structures of both polytypes have been refined from single-crystal X-ray diffraction data to $R = 2.6\%$ (M_1) and 2.4% (M_2). The structure of lazaraskeite in both its variants is new among minerals, whereas synthetic $\text{Cu}(\text{C}_2\text{H}_3\text{O}_3)_2$ is known to have the same structure of polytype M_1 .

The mineral name is a composite of the names of the two mineral collectors who found it, Warren G. Lazar and Beverly Raskin.

The state of Arizona is confirmed as the seat of beautiful and interesting crystals, as another mineral from Arizona was awarded “Mineral of the Year” in 2017: rowleyite, after the Rowley mine in Maricopa County.

The full description of the new mineral has been published in the *American Mineralogist* [Yang, H., Gu, X., Gibbs, R., Evans, S., Downs, R.T., Jibrin, Z. (2022): Lazaraskeite, $\text{Cu}(\text{C}_2\text{H}_3\text{O}_3)_2$, the first organic mineral containing glycolate, from the Santa Catalina Mountains, Tucson, Arizona, U.S.A. *American Mineralogist*, 107, 509-516].