

# 1981—A YEAR OF MINERALS

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All gems are minerals, but not all minerals are gems. This does not mean that only gem minerals are attractive. If any mineral crystallizes in a geological setting where it is not misshapen and crammed between other minerals, there is a chance it will form exquisite crystals with pleasing geometrical shapes. Well formed crystals are bounded by *natural* smooth surfaces, called crystal faces. Although they appear to be similar to the facets we see on gemstones, they must not be confused with them. Gem facets are put there by design, the gemcutter's art. In this 1981 calendar are some of Nature's "gems." These are attractive minerals that have crystallized in their own natural forms—some delicate, some meticulously geometrical, some bizarre.

A few of the photographs, however, are of the opposite kind of growth—where each mineral is crammed against other mineral grains, each distorted, warped, and limited in the size to which it could grow. These are photomicrographs of rock—thin sections—sections cut so thin that light can pass through the mineral grains forming the rock, revealing the internal structures. (See cover photo and the two photos for May in calendar.) These photomicrographs rival some works of modern art in their flamboyant displays of colors, shapes, and patterns.

Collections of minerals, such as Field Museum's, can grow, over the decades, in several ways: field collecting, purchases, exchanges, and donations of specimens and talents by friends of the Museum. In the right photo, below, Public Relations assistant Kathryn Slocum admires a group of gemstones recently donated to the Museum. The largest is a faceted kunzite of 506.24 carats, from Brazil. The round stone, center, is a 303.73 carat moonstone cabochon from India. Both stones were the gift of Ragnar W. Nordlof, Park Ridge, IL. The third largest is a 24.46 carat star garnet from Kellogg, Idaho, and a gift of Roy Barnes, St. Maries, ID. The smallest is a 5.626 carat synthetic emerald created by Union Carbide Corp., and the gift of Glenn Commons, Aurora, IL.

At the left is the late Walter F. Kean of Riverside, IL, an electronics engineer by profession but, by avocation, a gemcutter of extraordinary talent. In Field Museum's mineral collection there had been many gem minerals of excellent quality that had never been faceted. Over a period of almost a decade Kean, who died in 1975, gave his superb skill to cutting and faceting a group of gemstones from this stock of minerals. All of the stones on which he worked are on exhibit today in the Museum's Higinbotham Hall of Gems.



Walter F. Kean



Kathryn Slocum



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