



Figure 9. These three faceted liddicoatite tourmalines have been cut to emphasize their color zoning. The stone farthest to the left measures 12.68 x 6.61 x 3.71 mm and weighs 2.84 ct. Courtesy of Allerton Cushman & Co.; photo by Maha DeMaggio.

cut from a single 10 kg piece of rough from this locality. The largest stone faceted thus far weighed 27.25 ct; however, this rough is still being cut. Although we could not obtain gemological data on the stones shown in figure 8, spinel from this locality was described in the Fall 1993 Gem News section (pp. 213–214). The availability of this “by-product” spinel is also significant in that it shows that mining is continuing in the Luc Yen area.

**Parti-colored faceted liddicoatite tourmaline.** Liddicoatite from Madagascar is not new, but in general it has limited use as a gem material, because most crystals show pronounced color zones that would combine to “muddy” the color of a finished gem. (Because of this zoning, however, slices cut perpendicular to the c-axis are often dramatic, and therefore are sometimes used in jewelry.) Among the many gems from Madagascar that he was displaying, Tom Cushman also had liddicoatite that had been step-cut to emphasize the color zoning (figure 9), with an effect reminiscent of that seen in some fashioned parti-colored fluorite (see, e.g., Summer 1995 Gem News, p. 131). Mr. Cushman had about 50 examples of this material at Tucson, including several matched pairs.

**Another tourmaline source in Namibia.** Marc Sarosi of Marc Sarosi Co., Los Angeles, had several slightly bluish green faceted tourmalines that reportedly came from a single pocket found on a farm near Windhoek, Namibia (see, e.g., figure 10), which he showed at the booth of Andrew Sarosi. The locality was supposedly discovered by a farmer who was burying his dead dog. These tourmalines were very uniform in color (as was all the rough Mr. Sarosi saw) and quite transparent; the color was less

blue than most of the Neu Schwaben tourmaline described last year (Spring 1997 Gem News, pp. 66–67). About 3 kg of the rough material was recovered in April 1997, of which Mr. Sarosi managed to purchase about 1 kg; none has been discovered at this site since then.

## SYNTHETICS AND SIMULANTS

**Synthetic amethyst grown over round seeds.** For more than a decade, the gem market has been inundated with synthetic amethyst. Again this year, a great deal of this material was available at the Tucson shows. Recently, however, we were informed of a new type of synthetic amethyst, seen in Beijing, China, that was grown on dome-shaped seed crystals. (As a consequence of this shape of seed crystal, the seed would not show an obvious flat plane when the crystals were examined from the side.) Ms. Shen Meidong, of the National Gemstone Testing Center (NGTC) in Beijing, reported on the examination of purple crystals that were recently sent to the Identification Department of the NGTC. All were deep purple and showed “natural” quartz crystal faces (figure 11), including those in the forms  $r$  {10 $\bar{1}$ 1},  $m$  {10 $\bar{1}$ 0}, and  $z$  {01 $\bar{1}$ 1}. The crystals measured about 12 x 10 x 8–9 mm. Their gemological properties (as determined at the NGTC) were consistent with amethyst, both natural and synthetic.

Although all four samples looked like natural amethyst crystals, each had a dome-shaped colorless central region. These central regions contained two-phase (liquid and gas) inclusions typical of natural quartz. However, the purple overgrowths contained numerous “nailheads”: nail-like inclusions that extended from

Figure 10. This 30.57 ct green tourmaline is from a pocket found on a farm near Windhoek, Namibia. Courtesy of Marc Sarosi; photo by Maha DeMaggio.

