## SPODUMENE

Spodumene includes in its family Kunzite and

Hiddenite.



Hiddenite. (Photo: ATG)

Hiddenite (discovered by W.E. Hidden in North Carolina in 1879) is the emerald green variety, its colour being due to chromium (as with emerald). It has a strong vitreous lustre and is pleochroic (yellowishgreen, bluish-green, emerald green); great care is required when cutting in order to display the best colour. Though comparatively rare, it has also now been found in Burma (Myanmar), Brazil, Madagascar and California, USA. It is acceptably hard at 6.5 to 7 on the Mohs scale, but has a tendency to fade if left in strong light. Ultra-sonic cleaning should be avoided. It is usually heat treated.



Kunzite. (Photo: ATG)

Kunzite is a lilac-pink stone that is strongly pleochroic: violet, deep violet and colourless. It was originally discovered in California in 1902, but not of gem quality. A yellow-green variety that is of gem quality is found in the same location. Madagascar (Malagasy Republic), Afghanistan and Brazil, however, produce gem-quality lilac-pink kunzite.

Although it has a hardness of 7

(Mohs), it is fragile gem with a strong cleavage making it very difficult to cut. It is also subject to fading when exposed to strong light for long periods. Kunzite is not in general use but makes a cheap attractive addition to any collection.

## **TANZANITE**

Discovered at the Mererani mines of Tanzania in 1967, this gem is a variety of Zoisite. In nature it occurs in several colours, but all are usually heat treated to attain the beautiful violet blue that originally attracted the interest in this gem. A deep blue, which may be confused with sapphire, is expensive.



Zoisite crystal showing dichroism. (Photo: ATG)

Although of acceptable hardness, it is also somewhat fragile and ultra-sonic cleaning should be avoided. Use as a ring stone should be considered with care.

Tanzanite is strongly dichroic, showing red-violet and deep blue depending on the direction viewed. A green variety in gem quality has also been discovered.

It has been very strongly marketed, with pale colours of less appeal being coated or otherwise treated. However, supplies of good material are dwindling.