

GUIDE TO COLOR

A QUICK REFERENCE TO THE INTRICACIES OF

COLORED GEMSTONES

BY CYNTHIA MARCUSSON • CYNTHIA RENÉE CO.

ALEXANDRITE

The color change of even the finest alexandrites is modified by secondary colors. The degree of color change as well as size and clarity play a major role in determining price. A good color change is imperative to fetch a higher price.

Unlike the supply of diamonds, that of colored gemstones is not controlled. Because of this, occasional windows of opportunity for purchasing colored gemstones occur for a brief period of time when an unusual gem find hits the marketplace. At such a time, a rare gem may be available at relatively inexpensive prices until the supply is absorbed into the market. Such a thing happened with alexandrite in 1987 and happened again a short time ago with tanzanite.

In April of 1987, a find of superb alexandrite was made in the small Brazilian village of Hematita in the gem-rich state of Minas Gerais. No major finds of new material have been made since. The people who bought alexandrite during this window of opportunity got a good selection at an excellent price.

Heirloom jewelry with large "alexandrite" is usually a synthetic spinel with a color change.

Alexandrite Highlights

- Alexandrite was first found in Russia in 1830 and was named in honor of the Russian Czar Alexander. Alexandrite changes from bluish green to purplish red depending on the light in which it is seen.
- The first admirers of alexandrite viewed it in daylight and candlelight to see the green and red, respectively. Today, we usually use fluorescent and incandescent lights.
- Men are intrigued by the color-change phenomenon. Alexandrite provides sufficient durability for wear by men.

AMETHYST

Large, fine amethyst is difficult to find—especially with no apparent zoning when viewed through the table. Most natural amethyst will show some degree of zoning. Prices for the larger and finer material can seem steep.

Faceted amethyst is seen with varying degrees of cutting finesse. Many of the more commercial-quality amethysts are cut in a routine, labor-saving manner, while the fine material is often subjected to more precise and time-consuming cutting. Conversely, artistically cut amethyst can also be found since the stone is relatively inexpensive and weight retention is not a major factor in fashioning the cut.

Commercial-quality amethyst is plentiful, but the rich "grape jelly"-colored amethyst with red secondary coloration is anything but commonplace.

Continued on page 66

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THE FULL SPECTRUM

For the first time, all past Spectrum Award winners have been invited to show at the AGTA GemFair in Tucson.

The AGTA Spectrum Award Competition is the only U.S. design competition to honor the creative use of natural colored gemstones in original jewelry design. The coveted awards are presented annually to North American designers by the American Gem Trade Association—the voice of the natural-colored gemstone industry—in recognition of outstanding creativity and workmanship. Excitement is building again as the time approaches for announcement of the 1995 Spectrum Award winners.

In the meantime, as past winners, the designers listed above will exhibit their finished pieces at the AGTA show, February 1–6. Outstanding jewelry by some of these award-winning designers is showcased in the pages that follow.

Amethyst Highlights

- Fine amethyst has a rich and regal color. Purple has long been considered the color of royalty.
- The dark purple of amethyst looks particularly striking with yellow gold. The lighter colors, when well cut, can brightly shine and mesmerize.
- Amethyst has excellent durability. An amethyst ring can be worn for almost any occasion.

AMETRINE

There is the quartz gem family. Purple quartz is called "amethyst," while golden quartz is called "citrine." In only one place in the world does amethyst and citrine occur together in one gem, which we call ametrine: Bolivia's Anahí Mine. We call ametrine a one-locality gemstone, as are tanzanite, tsavorite and chrome tourmaline. But ametrine is even rarer, as it only comes from one mine whereas the other gems mentioned come from just one mining area.

The organized mining and marketing of ametrine is a recent development. Since most consumers are unfamiliar with ametrine, it's relatively low price is not reflective of its rarity and beauty. Price will increase with consumer demand. (Please see the author's article on the Anahí Mine in this issue for further information on ametrine's history, mining and jewelry uses.) Ametrine is one of the few gems that is not subjected to a treatment process in bringing it to the jewelry market.

Presently, ametrine is most typically seen in the emerald cut, which distinctly shows a sharp delineation between its purple and golden colors. Cutting the gem in other shapes, such as round or pear, creates a more subtly colored gem that shows a different color from every angle.

Ametrine Highlights

- You can get a large and distinctly colored gem at a very reasonable price. At present, ametrine's beauty and rarity are not reflected in its relatively low price.
- Purple and gold are opposite colors on the color wheel and, therefore, harmonious. They are an exotic color combination that touches human emotion.
- Gems can either show a distinct color delineation or be faceted in forms that have more subtle nuances of color which seem to change when viewed from different angles.
- Ametrine is a very durable gemstone and easy for Jewelers and lapidary artists to work with.

AQUAMARINE

Aquamarine is readily available in large sizes with excellent clarity. For any given quality, prices rise slowly with size to about twenty carats, then the price flattens as the jewelry uses for larger stones are limited.

The price of aquamarine is based on depth and purity of the blue color. Smaller-sized stones (one to three carats) which are darker blue and devoid of gray and green secondary coloration are much more difficult to find than their larger (five carats plus) equivalents.

Due to weight retention and crystal orientation, aquamarine is usually seen fashioned in the emerald cut. Rounds and the marquise cut are the most difficult shapes to find. Many of the stones are cut with slightly deep pavilions (bottoms), which

helps in darkening the color.

Most Brazilian aquamarine comes out of the ground greenish blue. These aquas respond readily to heat treatment, which purifies the blue color by driving away the green, resulting in a more marketable gemstone. The heating of aquamarine has been an accepted practice for decades.

Aquamarine Highlights

- Because of its rarity, aquamarine has lasting value and the chance for long-term appreciation, while blue topaz doesn't, due to its extreme abundance on the market from laboratory irradiation.
- When available, smaller-sized dark blue aquamarines allow you to purchase the finest aqua available at a minimal investment. They may cost more per carat than their larger equivalent, but their smaller size makes their total price realistic.
- Aquamarine is a gem with high name recognition. It has been a jewelry favorite since Edwardian times, when it was set in white metals.
- Aquamarine is the birthstone for March. Many will be amazed that their birthstone can be so well colored in sizes they can imagine wearing.
- Aquamarine is emerald's durable and less costly cousin.
- Aquamarine is believed to remedy idleness, help in winning disputes and protect from slander, which makes it a great gift for college graduates! It is also thought to protect against dangers and illnesses at sea, thus is appropriate for yachtsmen or sailors.

CITRINE

Most citrine is the end result of heating certain qualities of amethyst or smoky quartz. What is referred to as "Madeira" citrine is a deep, bright, reddish brown while "Palmyra" citrine is a medium, yellowish orange. Golden citrine is of a light gold to yellow color.

Citrine is readily available in quite large sizes for which it is not necessary to pay a premium price. In fact, price usually decreases for sizes over twenty-five carats as their use in jewelry is limited.

Citrine, though it can be quite attractive, is an inexpensive gemstone. Therefore it is often given a routine, labor-saving cut. Conversely, since it is inexpensive, it is sometimes found in more artistic cuts because weight retention is not a concern.

Citrine Highlights

- The golden colors of citrine create a striking optical illusion when combined with yellow gold. One wonders where the metal ends and the gem begins.
- Citrine is easy to wear every day as it is durable and accents the same clothing colors as yellow gold.
- Citrine is a beautiful and inexpensive gem which can be set in bold, striking jewelry.

EMERALD

A fine emerald is a true rarity and of great demand in the international marketplace. Prices for fine, three-carat emeralds easily exceed \$20,000 per carat. Does the customer's desire for top color and clarity match his or her bank balance? If not, sacrifices must be made in size, color and/or clarity. Which is more important?

Emerald inclusions, especially in gems from South Ameri-

Continued on page 68

ca, which tend to be more included than those from Africa, are routinely filled with oil and, increasingly, epoxy resin, to lessen the inclusions' visual effect. Since light moves through the oil or resin in a way similar to the way it moves through the emerald, the inclusions become less noticeable.

Emeralds are cut in what is called the "emerald cut" because it affords the greatest retention of weight when cutting from the rough crystal. Fine quality pear shapes, ovals and especially marquises and rounds are difficult to find and a price premium of ten to fifteen percent may be paid for finer stones in these shapes.

The possibilities for the misuse or misunderstanding of locality names are great. Their use is discouraged or forbidden by most national and international trade organizations. Colors and physical characteristics are inaccurately assigned as being typical of all gems of a certain species from a locality, when a locality assigned to a gemstone should simply indicate its origin and say nothing about its physical qualities. Nonetheless, trade usage of locality names continues and, when used, often refers to the following general characteristics:

COLOMBIAN EMERALD. Historically, the finest emeralds come from Colombia. Muzo and Chivor are the two major emerald mining districts in this country. At their finest, Colombian stones can be a vivid and intensely pure green, or slightly bluish green. They are, on very rare occasions, found eye-clean; inclusions are typical.

ZAMBIAN EMERALD. Zambia is the major producer of African emerald. Emeralds from this locality are typically much cleaner than the South American emeralds. They may be a bright green but often have a bluish tinge.

Brazil is an important source of commercial emerald. These emeralds are typically smaller. Though often light and highly included, gems of very fine color are produced. Pakistan's Swat Valley is not yet a major emerald source, though it holds promise for future development.

It is important to remember, when shopping for an emerald, that descriptions of quality, not locality, are needed since each locality produces varying qualities.

Emerald Highlights

- Emerald is historically the object of great desire and lust. Perhaps no other gemstone conjures up more images and associations with intrigue, beauty and richness.
- Emerald green is a very lush and soothing color. It is so soothing that Nero viewed the gruesome gladiator fights through an emerald.
- As the birthstone for May it represents spring and rebirth.

RED GARNET

Reddish garnets are found in a great many garnet species, mainly pyrope, almandine and pyrope-almandine. Several reddish garnets may have a strikingly similar appearance yet be different species. Specifically requesting a pyrope does not best convey the qualities of the garnet you need. Describing the color and not the species will get the project off to a faster start.

The preferred reddish garnets are the lighter purplish pink ones which most often fall under the variety of rhodolite. Generally, the more pink or purple and less brown a garnet, the higher the price, which reaches \$150–\$250 per carat for fine

rhodolites in sizes over fifteen carats. Darker reddish stones are also enjoyed by many, providing they are bright and well cut.

Red Garnet Highlights

- "Raspberry"-colored rhodolite from Tanzania is dazzling and available in a variety of sizes and shapes. Fancy precision cuts particularly unleash this gem's brightness.
- Jewelry manufacturers like rhodolite's consistency, beauty and price.
- Jewelers find garnet untemperamental and easy to work with. Garnet is a durable gem that men can wear with ease.
- True red garnets can be extremely bright and show sharp definition when contrasted against the richness of yellow gold.
- Unfortunately, many associate garnet with the somber red stone crowning their grandmother's less-than-exciting jewelry. Actually, garnet can be quite dazzling.

PERIDOT

Fine peridot is a rich and beautiful gemstone which is characterized by its medium to dark green or slightly yellowish green color. Most peridot has a slight touch of yellow. Upon seeing a fine peridot for the first time, those harboring peridot prejudice remark, "Now, that's beautiful; what is it?" Unfortunately, most people have been introduced to peridot by the overly yellowish or brownish green specimens.

There are two main sources for peridot today: Burma and Arizona. The San Carlos Indian Reservation of Arizona produces attractive, smaller-sized peridot; it tends to be more yellow or "limey" than the Burmese material. Typical sizes of Arizona peridot are from under one carat to three carats; five-carat stones are considered on the larger side. Burmese peridot can be magnificent. In finer qualities it is a spinach green without the limey or olive colors. These Burmese beauties can be found in the twenty- to thirty-carat range. There is a paucity of fine large peridot in today's market, and prices reflect this scarcity.

Size and locality play a major role in peridot's price. The price for a fifteen-carat gem is much different from that of an equivalent quality three-carat one. Fine stones from Arizona under five carats would barely fetch \$75 per carat. Fine peridots over fifteen carats can command prices up to \$250 to \$350 per carat.

Peridot, having a hardness of 6.5 to 7, is borderline soft for ring use. Over time, stones in rings may show wear in the form of scratches or worn facet junctions. Mounting the peridot in a protected setting helps, and the stones can be repolished, sometimes without removing them from the setting.

Peridot Highlights

- Like gourmet foods, fine peridot is an exquisite but acquired taste. It is for those with a sophisticated gemstone palate.
- Women have seen the peridot color in clothing fashions for several years.
- People with August birthdays who have never liked their birthstone will be delighted when they feast their eyes on the beauty of fine peridot.
- Peridot is beautiful combined with amethyst, pink and red tourmaline, red spinel, tanzanite or rhodolite.
- The United States is a major peridot producer.

Continued on page 70

RUBY

Very fine rubies are scarce—probably the rarest of all colored gemstones. Because of their beauty and rarity, they are in great demand in the international marketplace. Prices for larger fine rubies can seem staggering.

Burma has produced some extremely fine rubies, but fine rubies are not limited to those of Burmese extraction. As discussed in the section on emerald, the possibilities for the misuse or misunderstanding of locality names are great and the use of such designations is discouraged. Nonetheless, trade usage of locality names continues, often referring to the following general characteristics:

BURMESE RUBY. Historically, most of the finest rubies have come from Burma. They can exhibit a medium-toned, intense, pure (sometimes pinkish) red which fluoresces in ultra-violet light or daylight. *Pigeon's blood* was a term used to refer to the red of a fine Burmese ruby, since it doesn't convey a color with any accuracy, it is not recommended for use today.

THAI (SIAM) RUBY. These are typically thought of as being darker in tone than Burmese rubies and often brownish red to dark purplish red. Actually, Thai ruby makes up the bulk of the world's production and comes in all qualities, some of it very fine.

CEYLON RUBY. From Sri Lanka, this ruby is thought of as light in tone and is pinkish red or light purplish red (near pink sapphire) in color.

VIETNAM RUBY. An exciting and newer gem discovery is high-quality ruby from Vietnam. These rubies can mimic the finest Burmese in coloring and are often pinkish. Most are melee-sized and are not often seen over one carat. They are generally included. Don't get the impression that this is a source of "cheap" Burmese-quality rubies; two-carat gems can sell for \$15,000 per carat.

As discussed under emerald, it is important to remember that when requesting a gemstone, descriptions of quality, not locality, are needed because each locality produces varying qualities.

Ruby is one of the gemstones in which, all things being equal, a price premium is affixed to particular shapes. Better-quality rubies are usually seen in oval or cushion cuts. Generally, these shapes allow the cutter to get the most brilliant gemstones with the greatest recovery. If your customer insists on a fine and larger-diameter round ruby, try to find a squarish cushion that can be recut into a rounder shape or set with that illusion. The marquise is more of a novelty cut, and its popularity is not easily insured. Instead of cutting a marquise, cutters will usually cut a shape they can sell faster—unless the rough dictates a marquise for greatest recovery. The emerald cut, with the pavilion cut in long rectangular "step" facets, does not bring out a ruby's brilliance as does an oval or cushion cut.

A price premium is also placed on a ruby's size. Other things being equal, a loose rule of thumb is to expect to pay four times as much per carat for a three-carat ruby as for a one-carat stone and twice as much for a three-carat ruby as for a two-carat ruby.

Since fine rubies are rare and expensive, some allowance must be made in expectations for perfect cutting. Still, a

better-cut ruby makes a much more attractive and wearable gemstone. Flat, lens-shaped or overly deep stones should be less per carat than gems of similar weight and quality that boast good cutting. Because of the rarity of the material and often primitive conditions under which they are cut, you can expect cutting that falls short of the optimum.

Clients should be asked if they would rather have a smaller and finer ruby or one that looks larger in jewelry but is not as fine in quality. If they are unable to purchase the finest, what degree and hue of secondary coloration and inclusions are acceptable?

Ruby Highlights

- Red is an emotional and passionate color. Ruby jewelry commands attention. Rubies are especially beautiful accented by diamonds and are appropriate for yellow gold or platinum.
- As July's birthstone, ruby brings excitement to the magic of hot summer nights.
- Ruby is known as "The King of Gems" because of its extreme rarity and beauty in finer qualities. A fine ruby has international value and appeal; it is coveted by people of all nations.
- Europeans have often used ruby, not diamond, in engagement rings.

BLUE SAPPHIRE

Kashmir and Burma have produced some extremely fine sapphires, but fine sapphires are not limited to those particular localities. As with emeralds and rubies, the likelihood of the misuse or misunderstanding of locality names is great. Nonetheless, trade usage of locality names continues and often refers to the following general characteristics:

KASHMIR SAPPHIRE. Used to refer to what many consider the finest color of sapphire, which is a highly saturated, medium blue to slightly violetish blue, sometimes having a soft, velvety quality. "Cornflower" blue has been used to describe this color, but it is not an accurate term.

BURMESE SAPPHIRE. This is considered an extremely fine quality of sapphire. At its best, it shows a saturated, medium blue to slightly violetish blue. It may be "crisper" looking than the velvety Kashmirs. It is sometimes referred to as being "royal" blue, which, again, is not a precise term.

CEYLON SAPPHIRE. From Sri Lanka, these sapphires (when unheated) are generally very light to medium blue, grayish blue to blue-violet. Because of their lighter tones, the stones can be quite brilliant, especially when well cut. Many Ceylon sapphires exhibit extremely fine color.

THAI SAPPHIRE. Typified as being dark to very dark in tone and of a bluish black color. A lot of higher commercial-quality sapphire comes from Thailand.

It is important to remember that descriptions of quality, not locality, are needed because each locality produces varying qualities.

Since fine sapphires, which are in the higher gemstone price range, are difficult to find, some allowance must be made in expectations for perfect cutting. Still, a well-cut sapphire makes a much more attractive gemstone. Flat, lens-shaped or overly deep stones should be less per carat than gems of similar weight and quality that are well cut. Cutting often falls short of optimum due to the rarity of the material

Continued on page 72

and often primitive conditions under which sapphires are cut.

As is the case for ruby, finer sapphires are usually seen in oval and cushion cuts. The long, rectangular pavilion facets on the emerald cut do not enhance a sapphire's brilliance as do the oval or cushion cuts. (Please see the Ruby section for a discussion of cutting styles.)

Blue sapphires are routinely heated. If not for this, many people would never be able to acquire and appreciate one for themselves. It is safe to assume that all sapphires you see have been heated unless specifically disclaimed. Because of their rarity, unheated sapphires are slightly more in price than an equivalent quality heated stone. However, a fine heated stone can command much more than a mediocre unheated stone.

Blue Sapphire Highlights

- Fine blue sapphire, with its cool, tranquil coloring, is internationally valued and desired.
- If your customer isn't in the market for the biggest and best sapphire, find a bright pastel-blue sapphire which is much more beautiful than an inky blue gem of the same price. The lighter blue stones also look great combined with other colors of fancy sapphire.
- According to the ancient Persians, our earth rested on a large blue sapphire whose reflection was seen in the sky.

FANCY COLOR SAPPHIRE

Sapphire that isn't deep blue is termed "fancy." Some of the finer qualities of fancy sapphire, such as the intense hot pinks, can command as much, if not more, than fine blue sapphire of the same size. Those who want a pink sapphire but balk at the price of an intense pink may be happy with a less expensive purplish pink sapphire.

Fine, intense "fuchsia" pink sapphire is hard to get. Finding a pair to match the one in a ring will take some time, and the colors may not match upon close inspection.

Pale yellow sapphires are routinely heated to achieve a deeper, more intense yellow to golden color. Lemony yellows tend to be more desirable than the overly golden tones. Unheated intense yellow sapphires are rarely seen. The large, clean oranges, devoid of brown, are particularly coveted in the Orient and priced according to their rarity. It is important to recognize what shades of yellow and gold you prefer.

Though not as rare as natural pink diamond melee, fine pink sapphire melee is still not easy to come by.

The Umbra area of Africa produces sapphires ranging from bright to spicy-colored.

Fancy Color Sapphire Highlights

- Recommend jewelry combining several fancy colors together in one piece.
- A sapphire of a different color—a fancy sapphire—celebrates the individuality of the wearer.
- The intense, hot pink sapphires are exactly that—hot!
- Pink sapphires are very feminine and great in engagement rings. Pink is also the color of unconditional love.
- Yellow sapphires permit the pleasure of wearing a large stone that comes from a much different price range than an equivalent blue sapphire.
- Yellow sapphires are particularly striking set with black pearls, black mother-of-pearl or red tourmaline. A yellow sapphire ring with blue sapphire and diamond accents or a pink sapphire with ruby and diamond accents would be other intriguing possibilities. Combinations of light blue, pink and yellow sapphires can be worn by the adventurous in a variety of jewelry pieces.

PADPARADSHA SAPPHIRE

A true padparadsha sapphire is of light to medium tones of pinkish orange to orange-pink. Unfortunately, many sapphires labeled as "pads" don't fall into this color range. Rust-, orange- or purplish-colored sapphires are not padparadsha but fancy sapphires.

Good padparadshas are very difficult to obtain. A supplier of fine sapphires will feel quite fortunate to have one in inventory

at any given time. As is the case with other rare, fine gemstones, wide choice and specifications of dimensions are not possible.

Padparadsha Sapphire Highlights

- Fine padparadsha sapphire is one of the rarest and most expensive gemstones; it is for lovers of the mysterious.
- The word *padparadsha* derives from the Sanskrit



Sapphires are found in an almost incredible variety of colors. Gems from Cynthia Renée Co. Collection.

word for lotus flower, *padmaragaya*. A lotus flower is rosy-red when it is about to open. A padparadsha might be better described as a marriage of a Sri Lankan sunset (orange) and a lotus flower (pink).

- A padparadsha sapphire captures the colors of and feelings stirred by a spectacular sunset.

STAR SAPPHIRE & STAR RUBY

Fine star sapphire and ruby are especially coveted and in demand. Stars are not just seen in blue, gray or black sapphire; pinks, purples and lavenders can also have stars. A true red star ruby is the rarest star. Prices for the finer stars reflect their exalted status.

Continued on page 74

Star sapphire and ruby values are based on color, clarity, orientation and definition of star, translucency and symmetry. Optimally, the star's hub should be centered on the dome and should have six rays, or "legs," of equal definition that extend from the dome's center to the girdle. Most star sapphires on the market are of a commercial gray to bluish gray color; the purer the blue, the more desirable the color is considered. A blue sapphire with a moderate-to-good star commands a higher price than a grayish sapphire with a strong star.

Star sapphires are often seen a bit bottom-heavy or with a high dome, which may help in the orientation and definition of the star.

Star Sapphire & Star Ruby Highlights

- A fine star sapphire is a real prize and in worldwide demand.
- Marvel at this natural phenomenon by shining a penlight on the star or holding it under a beam of sunlight.
- A person who wears a fine star sapphire owns a distinctive natural wonder.

SPINEL

The beautiful bright spinel can tempt you with a variety of colors. Over the centuries, fine red spinels have been repeatedly mistaken for rubies. With today's sophisticated gemological equipment such mix-ups need not occur; still, upon visual inspection, it is not always easy to tell the two apart. Most red spinel has brown, orange or pink secondary coloration; the purer the red, the higher the price. The intense, slightly orangish or pinkish reds can be very vibrant.

Fine blue spinels are rarely encountered; most are overly gray, and blue spinel doesn't mimic blue sapphire as well as red mimics ruby.

For reasons similar to those affecting emerald, ruby and sapphire, spinel is usually fashioned in oval and cushion cuts. (Please refer to the Ruby section for a discussion of cutting styles.)

Though they do not command the high price of ruby, matched pairs of fine red spinel are rare and unusual.

Spinel Highlights

- Red spinel has been historically mistaken for ruby. The British Crown Jewels' Black Prince's ruby and Timur ruby are actually red spinels. Think of ruby as red silk and spinel as red satin.
- Spinel's rarity and beauty are not accurately reflected in its relatively low price. But...its popularity is gaining.
- Spinel is available in a variety of shades and colors.
- Spinel is durable and attractive enough to set in a wedding ring.

TANZANITE

We all wish the smaller tanzanites could match the color of the larger, well-colored ones. A two-carat tanzanite will not match the color of a finer eleven-carat tanzanite. The size of the larger gemstone helps to concentrate the color. It is the same scenario as that described under aquamarine. The smaller tanzanites, though they can be well colored, just can't compete with the color of the heavier ones.

Tiffany & Company, who tried to become the United States' sole marketer of tanzanite, coined the name in honor of the gem's homeland; it was found in Tanzania during the late 1960s.

All tanzanites on the market are subjected to heat treat-

ment. Though heating can occur naturally in the earth, most tanzanites start as light brownish purple and must undergo heating to turn the deep, rich indigo blue we so admire.

Tanzanites, depending upon how they are oriented during cutting, can be pure blue or include the secondary and tertiary colors of purple and red. Some people prefer the pure blue tanzanites which most nearly resemble sapphire. Others opt for the most exotic reddish and purplish blue gems.

If your Jeweler can work with emerald, kunzite or topaz, then working with tanzanite shouldn't be a problem. When tanzanite first came on the market in the early 1970s, Jewelers' experience with it was limited; many stones were cracked due to unfamiliarity with handling its temperature requirements. Unfortunately, tanzanite got a reputation as being a difficult stone with which to work. Tanzanite is susceptible to sudden changes in temperature and can crack due to thermal shock. Care should be taken when sizing tanzanite rings, and it's best not to have them cleaned ultrasonically.

If care is taken, tanzanite rings can be worn every day—even if set with four prongs. One woman who wears her prong-set tanzanite daily removes it when working in her kitchen so it doesn't inadvertently go from the cold sink to the hot oven!

Tanzanite Highlights

- Prices for tanzanite are extremely competitive. A major find of tanzanite hit the market around 1990. As in other markets, colored gemstones are priced according to supply and demand. Tanzanite's greater supply temporarily lowered prices. Now, again, fine tanzanite is scarce and prices, though not at the level of before the big find, are rising. Greater exposure has increased public awareness, creating a higher demand. Tanzanite is becoming well established as a jewelry-store staple. While tanzanite is widely available, finer qualities are not in abundance.

- Because of East African political and economic turmoil, it is difficult to predict long-term production. Tanzanite is a great gemstone to buy now, as it will probably become more scarce.

- Large, fine-quality tanzanites over ten carats are available. You can purchase the best tanzanite in a large size.

- People are attracted by the color(s) of tanzanite; it is exotic, fashionable and a conversation piece.

- Tanzanite is much less expensive than a sapphire of equivalent quality.

TOPAZ

Topaz is a very bright, attractive gemstone which, at its best, is found in varying combinations of orange, red and pink. It is readily available in yellow, gold, and blue colors.

Imperial, *precious* and *sherry* are marketing terms sometimes used to indicate certain colors and qualities of topaz. Their use is inconsistent and discouraged or forbidden by most national and international trade organizations. Nonetheless, trade usage of these terms continues and often indicates the following general characteristics:

IMPERIAL TOPAZ. Orangish red, reddish orange to red and deep pink in color.

PRECIOUS TOPAZ. Peachy orange to slightly orangish gold in color. At one time, this term was used to denote a true topaz from a smoky quartz.

Continued on page 76

SHERRY TOPAZ. Yellow, yellowish brown to gold in color.

It is important to remember that when shopping for a topaz, descriptions of color, shape and size are needed instead of one of the marketing terms listed above.

Most pink topaz is the result of the heating of reddish brown to purplish red topaz; it is a stable treatment.

Almost all of the world's topaz originates in Brazil. Supply of imperial topaz is very low and there is particularly strong demand.

Topaz has a hardness of 8, is resistant to scratches and can achieve a brilliant polish. During wear, it should be protected from hard blows.

Topaz Highlights

- Topaz has a high name recognition, yet many people have never seen a fine topaz. Very few people have ever seen how attractive fine topaz can be.
- Topaz has a romantic sunset color. It has the beauty of a padparadsha sapphire, in a larger size for a fraction of the price.
- Topaz is a brilliant gemstone readily available eye-clean. It appeals to people who are finicky about the inclusions in other types of gemstones.
- Fine reddish topaz is a "collector's quality" gemstone.

BLUE, GREEN & CHROME TOURMALINE

Green tourmalines are categorized as those colored by iron and those colored by chromium and/or vanadium. The former are referred to simply as green tourmaline, while the latter are called chrome tourmaline. Remember that all chrome tourmaline is green but not all green tourmaline is chrome!

The term *indicolite* (derived from *indigolite* in reference to its blue color) is a subjective word frequently applied to any bluish tourmaline. While it is intended to describe a pure blue, one can find it used with tourmalines that have only the slightest hint of blue. Some authorities consider the term an "insignificant varietal name" and campaign against its use. Instead, they recommend that tourmaline be described by a color modifier such as "green" or "bluish green" tourmaline. Alternative names create the opportunity for confusion but, nevertheless, they are active in the trade.

Green is achieved by mixing the primary colors of blue and yellow. The countless combinations of blue, yellow and green provide us with tourmaline in a tremendous variety of hues. Applied to tourmaline, green should be judged on its freedom from brown or overly yellow hues. Green tourmaline is extremely plentiful, though bright, "happy" greens may be

a bit more difficult to locate.

Blue tourmaline has a great range of colors from vibrant teal, to dark aquamarine, to intense "sapphire" blue. Blue tourmaline is often listed as a good blue sapphire substitute, though the blue tourmaline that most resembles sapphire is typically over-dark and blackish blue. Most blue tourmalines have gray or green secondary coloration. Finding a true blue tourmaline is a real trick, and the finer qualities can fetch quite a price.

The newer tourmaline from Paraiba, Brazil, has garnered international attention for its tremendously vivid blue, blue-green and green colors—more intense than any other tourmaline seen to this time. Many call this discovery one of the most significant gem finds in recent history. The production is scant and prices are holding high. High means \$5,000 per carat for a five-carat electric-turquoise gem.

Chrome tourmaline is from a localized area in East Africa. Due to its scarcity, especially in sizes over five carats, it is also difficult to replace or match. Locating a very fine chrome over five carats requires quite a search.

Chrome tourmaline is difficult to find in melee. Tsavorite, which is mined in more localities, is much more abundant in melee sizes and is a good alternative.

It is no coincidence that both green and blue tourmaline are usually seen in the emerald cut. Imagine you are holding an uncut green or blue tourmaline crystal. It is elongated and pencil-shaped. In most cases, if you look down the length of the crystal, the color will be much darker or more olive than if viewed from the side of the crystal. So that less of the darker, unattractive color will be seen in the finished stone, the gem must be cut

with its table parallel to the length of the crystal. Steeply angled ends must also be used. The emerald cut most easily allows for steeper ends and gives greater weight retention from the uncut crystal. For these reasons, oval-, cushion- and round-cut green and blue tourmalines are found far less frequently.

Chrome tourmaline is seen in a greater variety of shapes; its color is not as affected by orientation of the crystal axis. This allows the cutter greater freedom in choosing the final shape. Chrome tourmaline tends to be dark. To combat this, a skilled cutter may cut a shallower gem and add extra facets to obtain greater brilliance.

Blue, Green & Chrome Tourmaline Highlights

- Green, chrome and blue tourmalines are stunning on their own merits and are not merely substitutes or look-alikes for emeralds or other gems.



Bicolor tourmalines are set in platinum and rose-gold ring and cufflinks handcrafted by Mirjam Butz & Brown. Gems and design from Cynthia Renée Co.

Continued on page 78

- Large and fine-quality green and blue tourmalines are available. You can purchase the best qualities of blue or green tourmaline in large sizes.

- Because of its limited locality and the political and economic turmoil in East Africa, it is difficult to forecast the long-term availability of chrome tourmaline. Chrome tourmaline is a great gemstone to buy now as it will probably become more scarce.

- The green and blue colors are very well suited for men's jewelry. They are durable and masculine. Blue, green and chrome tourmalines can also provide the beauty and durability needed for wedding rings.

- Green or blue tourmaline is striking when combined with pink or red tourmaline. Green tourmaline also is intriguing with amethyst and blue tourmaline or rhodolite garnet.

- Mounted with the solitary, bold elegance of yellow gold or with other colored gemstones, vivid green, chrome and blue tourmalines are certain to captivate the imagination.

PINK & RED TOURMALINE

Due to the nature of the geologic system in which they are formed, red and pink tourmalines almost always contain inclusions. Inclusions in pink and red tourmaline are as accepted as those in emerald.

Rubellite is a term frequently applied to red and pink tourmaline but its use may cause confusion. Many authors describe rubellite as meaning both red and pink tourmaline, while others relate the term only to red tourmaline. It's hard to tell which is correct. Some authorities recommend that the term be dropped altogether, contending that tourmaline may be best described by a color modifier as in "purplish red" or "orangish pink" tourmaline. Not only have the alternative names become confusing, but the term rubellite may create the negative connotation of a type of ruby imitation. In this era of abundant gem substitutes, the term may be especially misleading.

The intensification of red and pink tourmaline through laboratory irradiation has been successful. Laboratory irradiation of tourmaline does duplicate the natural coloring process. Tourmaline that is red or pink upon extraction from the earth gained its color by coexisting with minerals that emitted low levels of radiation.

Pink & Red Tourmaline Highlights

- Pink is one of the most flattering and versatile colors. Pink tourmaline jewelry will harmonize with almost every fashion color. If you wear navy, black and white, pastels, greens, blues, reds and even

khaki, your beautiful pink tourmaline jewelry will show up even better. In fact, pink tourmaline is smashing even with some shades of orange.

- Some people will be interested in the geologic history that inclusions reveal, including traces of a gem's "liquid past." Interestingly, during the last Chinese Imperial Dynasty, there was a tremendous demand for the intermediate, carving grade of pink tourmaline, which was preferred over the cleaner grades. The reasoning was that clean gems could be produced by man while included ones were more obviously nature's handiwork!

TSAVORITE GARNET

Tsavorite, the vivid green grossular garnet, was first discovered in the late 1960s in Kenya's Tsavo National Park. Tiffany & Company, who tried to become the United States' sole marketer of this new garnet, coined the varietal name, "tsavorite," honoring its locality.

To earn the name tsavorite, the garnet must be a vivid, rich, darker green and not a lighter, pastel or overly yellowish green. The finest tsavorites have a tinge of blue to their green color.

Limited by the geology of the deposit, tsavorite does not come in large sizes. In fact, a three-carat fine tsavorite is considered unusual. Fine five-carat stones are rare. Since the extent of the deposit is limited and mining is sporadic, a fine tsavorite in any size is an unusual gem. Small, fine-textured inclusions are typical.

Tsavorite is usually seen in the cushion or oval cut; pear-shaped stones are also available. Generally, these shapes allow the cutter to get the most brilliant gemstones with the greatest recovery. The emerald cut does not maximize the gem's brilliance. If someone insists on a large, round tsavorite, try to find a squarish cushion that can be recut into a rounder shape or set with that illusion, since fine rounds over 6 mm are not easy to locate.

Tsavorite Garnet Highlights

- The beauty of a vivid, rich green tsavorite is moving. People are very attracted to its brightness and lush color.

- Melee sizes of sparkling green tsavorite are available, allowing for jewelry with interesting calibrated work.

- Tsavorite is rarer and more durable than emerald, yet less expensive.

- Tsavorite and tanzanite are two rare and vividly colored gemstones from East Africa. Both gemstones are also new—being first found in the late 1960s. JQ

Cynthia Renée Marcusson has been immersed in the gem and jewelry trade since 1982. Beginning as a gem mine geologist, Cynthia was soon lured by the creative challenges of the jewelry industry. After seven years with an internationally recognized gem mining concern, she started her own company, Cynthia Renée Co., a firm bringing innovative Jewelers the powerful combination of fine colored gemstones, promotional expertise, intensive training seminars and creative jewelry design.

Ms. Marcusson focuses primarily on helping some of the nation's finest jewelry stores locate and acquire colored gemstones. Her diverse roles require extensive public contact in the presentation and promotion of colored gemstones, interaction with domestic and international members of the gemological and scientific communities, knowledge of physical properties and economics of gemstone varieties, creative skills in jewelry design and manufacture, plus experience in coordinating and producing promotional materials and advertising.

Ms. Marcusson is a frequent speaker on such subjects as gemstone mining, jewelry selection and design and the colored gemstone market. The American Gem Trade Association has featured Cynthia's seminars at its Tucson GemFair since 1989, and JQ Magazine regularly features her articles.

Cynthia Renée Co. will be exhibiting at the GLDA Show, February 4-11, 1995, in Tucson, Holiday Inn, Manhattan Ballroom, Booth 6.

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