

ACCREDITED

GEMOLOGIST

ASSOCIATION

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TO DEVELOP AND PROMOTE PROFESSIONAL STANDARDS
IN THE PRACTICE OF GEMOLOGY

This is the first official newsletter of the Accredited Gemologists Association. Like most newly-formed organizations, the AGA has had its share of growing traumas. For any inconveniences caused to members or potential members, due to lack of communication or inconsistencies in policy, our apologies are here offered. It may be noted that part of the lack of continuity in the first year of AGA was due simply to the normal problems of creating an organization from scratch. A later problem was the news that Sam Schwartzman, husband of the co-founder of the group, Sonja S. Schwartzman and one of the group's hardest workers, had suffered a heart attack. Sam recently underwent open-heart surgery, which was successful and he is recovering quite well. Such an occurrence obviously occupies the full time of those involved; since Mrs. Schwartzman is Corresponding Secretary of the AGA it is understandable that communications within the group were interrupted. Hopefully we are now back on track and solid growth plans are being laid.

The following is a brief history of the formation of the AGA (notes provided by Sonja S. Schwartzman and Dale Farringer).

HISTORY OF ACCREDITED GEMOLOGISTS ASSOCIATION

An idea was conceived by Sonja S. Schwartzman and Tomiko Butler to form a gemological study group. The basic thought was that many gemologists pursue this field as an avocation, and without constant exposure to new trends and developments would lose their "currency" in terms of both the scientific and commercial aspects of the field. Informal gatherings of gemologists to share new ideas and look at gemstones would therefore be of benefit to all involved.

On January 31, 1975 Sonja and Tomiko met with A.C. Bonanno and formed an American Alumni of F.G.A. The goals of the group were simply to keep abreast of the latest developments in gemology: learn about new gemstones; work together on research projects; discuss new equipment and procedures in gem testing; discuss new books; and exchange ideas in general. Notification of the existence of the group was sent to the Gemmological Association of Great Britain (contact with Mr. H. Wheeler) and the Association approved. Initially, then, full membership in AGA required an F.G.A. diploma. However, one could become a student affiliate if he was actively enrolled in the Diploma course.

It was then decided that in expanding membership in AGA it would be desirable to broaden the base of support and include graduate gemologists of the G.I.A. The group would thus include gemologists with recognized accreditation by the world's major teaching organizations. The expanded group became the ACCREDITED GEMOLOGISTS ASSOCIATION.

The first formal notice of formation of AGA appeared in the October 1975 issue of the Journal of Gemmology. Subsequent meetings were held (in 1975) on April 25, June 4, June 12, July 19, August 27, Sept. 25, Oct. 15 and in 1976 on Jan. 14, April 28 and May 24. Officers were elected in Oct., 1975, as follows:

President - Jim Rosenheim, GG 1st V.P. - Theresa Zook, F.G.A.
2nd V.P. - Janet Post, GG Corresponding Sec'y. - Sonja Schwartzman, F.G.A.
Recording Sec'y. - Dale Farringer, GG Treasurer - Robert Daube, GG

Joel E. Arem, Ph.D. was asked to be mineralogical adviser to the AGA, and act as consultant. A code of professional conduct was adopted on Feb. 18, 1976; this is to be signed by all present members and applicants for membership. By-Laws for the AGA have been written and adopted. Membership certificates and cards have been acquired and are being distributed.

IMITATION JADEITE AND EMERALD

Translated and summarized by TOMIKO BUTLER, F.G.A. from an article by Masao Namiki in Journal of the Gemological Soc. of Japan, Vol. 1, No. 1, 1974 (p.10) & No. 2, p.12.

A certain type of quartzite, mined in Formosa in recent years, is creating confusion and surprise for gem dealers and the public in the Far East.

This quartzite, which occurs as opaque or translucent masses, can be readily dyed green. The opaque material resembles jadeite, and the translucent variety resembles emerald. The structure of the opaque material resembles jadeite, especially the appearance of dyed jadeite under the microscope.

The dye is added after the cabochon is already cut. The coloring agent can be observed as green dots in cavities in the structure, at magnifications of 10-45 X.

Parameters are as follows: R.I. = 1.53-1.54; S.G. = 2.65; spectrum: bands at 6800-7000Å and 6400-6600 Å. No change of color observed through the Chelsea Filter. If the dyed material is exposed to an alcohol flame for 2 minutes, the color seems to fade within about 30 seconds.

Many Japanese tourists have purchased what they believed to be emeralds, set in platinum and even surrounded by diamonds, which proved to be the dyed quartzite. These emerald simulants came to the attention of members of the Gemmological Soc. of Japan, who determined their true nature. These stones were slightly bluish-green, and some had inclusions of biotite.

GRADING DIAMOND FANCIES by THERESA ZOOK, M.A., F.G.A.

Recently the question arose as to how colored diamonds, both those occurring naturally and those whose color has been produced through irradiation, might be evaluated. It is my understanding that the G.I.A. does not have charts to give the prices of fancies, since these stones vary too widely in that no two stones may fit the same written descriptions and may be far apart in beauty. In addition, no two importers are apt to price the fancies equally. The advice has been given by G.I.A. that to grade natural fancy diamonds the stone should first be valued as an "F" color. A percentage correction is then applied to this value, depending on the fancy color. Fine blues, violets and pink diamonds are evaluated at 100%+ the value of a colorless stone of F color. By contrast, steel-blue and green diamonds are rated at 80-100% the value of an F-color stone; canaries* are valued at 50-70%, and browns at 30-50% of comparable F-colored diamonds.

Treated diamonds in fancy colors are graded as "M" color and then \$25-30 per carat is added to the original value to cover the cost of treatment.

Robert Webster in his authoritative book, GEMS (3rd Ed., 1975) discusses color changes in diamonds on pages 610-615. Cyclotron-treated diamonds of a brown or yellow color were found to show a narrow absorption line at 5940 Å; this absorption line is absent in natural brown and yellow diamonds. Webster also states that irradiated brownish-pink diamonds show absorption lines at 6370 Å and a pair of lines at 6200 and 6100 Å, in conjunction with the 5940 Å line. Treatment in a nuclear pile plus heat treatment can also produce brown and yellow colors, but again the 5940 Å line is conclusive evidence of treatment. Webster indicates that the green diamonds resulting from pile treatment have an unnatural color, and there is an absorption line at 4980 Å equal in strength to the one at 5040 Å. Webster states that all natural blue diamonds are type II and are electrically conductive, and have greater transparency to ultraviolet light all the way down to 2200 Å, in contrast to the Cape diamonds usually used for coloration which transmit down to about 3000 Å.

Robert Corwningshield (Gems & Gemology, vol. 15, no.2, Summer 1975, p.58-59) states: "If diamonds (usually blue, but also laminated brown stones) show semi-conductivity, they must be of natural color." However, Crowningshield describes one brown stone that was treated and lost its conductivity, but was still identifiable with the spectroscope. He notes that it has subsequently been learned that: "treating will not necessarily cause a stone to lose conductivity. Fortunately, type II-b stones are quite rare - and rarer still are the ones that would suggest treatment."

(*light color)

(Zook - cont'd.)

For pictures of naturally tinted diamonds, see:

National Geographic, vol. CXIII, No. 4, April 1958; Switzer, G.S., "the Many-Sided Diamond", page 569.

Jewelers' Circular Keystone, Aug. 1973, p. 21: A.V. Gumuchian, Inc. "Spectrum Collection".

Jewelers' Circular Keystone, July 1974, Vol. CXLIV: "Colored Diamond Collection: A Life's Work" - collection of Andre Gumuchian, "The Spectrum".

For pictures of irradiated colored diamonds, see :

Lapidary Journal, Vol. 27, no. 1, April 1973, p. 60: article by E.B. LaVelle

SOME PITFALLS IN THE APPRAISAL OF ANTIQUE JEWELRY by Jim Rosenheim, GG

If you are a trained gemologist and perform appraisal services, it is likely that at some point in time you will be called upon to establish the value of various jewelry articles. Most such appraisals are not overly difficult, because of the ready availability of such information as current cost of gems, labor and related materials.

However, the appraisal task is immeasurably complicated when the item in question is antique or nearly so (i.e., 100 years old). Unlike contemporary articles of jewelry, antiques possess an extrinsic value that may far outweigh the cost of materials and labor required to create the piece, by today's standards. The fact that the item is representative of a particular period or style (i.e. Georgian Period or Art Deco style) can have a drastic effect on value. Likewise, the country of origin (e.g. French art nouveau as opposed to American) or a maker of note (e.g. Faberge, Castellini or Lalique) could affect the value enormously. I have seen many a gemologist, widely experienced in the appraisal of modern jewelry, take a condescending attitude toward a somewhat crudely rendered rose-cut diamond and silver article of jewelry from the 18th Century, declaring the diamond to be inferior cut, color and clarity and giving it a value of several hundred dollars. In actuality, due to the age and rarity of the piece, its value could be many thousands of dollars. It is also a fact of life that excellent reproductions exist, both new and antique, that require careful scrutiny to distinguish from originals.

In examining antique jewelry items it is important to note that, even as in modern pieces, a gem does not always turn out to be what it first appears to be. Imitations and doublets were frequently used along with natural gems of the same appearance. In some later pieces synthetics were also utilized. Remember that Verneuil corundum was being made in quantity as early as 1910! Also, it is wise to remember that during the lifetime of the jewelry item the original stones may have been replaced due to wear or loss, and substitutes of lesser value inserted. This can have a profound effect on both the intrinsic value and the antique value of the piece. Additionally, it is wise to keep a "sharp eye" for rare or unusual gems that today might have great value, but a century or more ago were relatively inexpensive (e.g. demantoid, alexandrite and black opal). These rare gems turn up often in pieces of otherwise quite inferior quality. Also remember that gemological knowledge was much less widespread and sophisticated then than today, so a "ruby" in an antique ring may well be a red spinel. Also, "paste" was frequently used in the 18th and 19th Centuries; such items have become increasingly rare and expensive.

As a final consideration, examine the physical condition of the jewelry item in question. Is it worn? Does the wear seem reasonable for its age? Can the item be refurbished and, if so, at what cost? Is the overall condition exceptionally good for its age? These are all questions that should be answered before a value is determined.

In conclusion let me state that I have found and continue to find the appraisal of antique jewelry a fascinating, challenging and, at times, frustrating venture. It requires constant vigilance to keep abreast of an extremely volatile market. The styles from different periods and geographical areas may rise and fall in popularity. Logically, as particular articles, periods or areas come into favor, the price of their representative jewelry increases.

(continued)

If this all sounds like you are opening Pandora's Box when you accept an item of antique jewelry for appraisal, you are correct. A long, careful and continuous study of the subject, accompanied by ongoing sessions with one of the handful of dealers truly experienced in the wide range of antique jewelry available, is mandatory if you want to tackle the challenge alone. If this all sounds like too much trouble, then by all means forego the experience and find someone to whom you can refer these antique headaches.

NOTES AND NEWS:

Change of address at G.I.A.: As of July 12, 1976, the GIA will have the following addresses:

Mailing: PO Box 2110, Santa Monica, Cal. 90406

Building Location: 1660 Stewart St., Santa Monica, Cal. 90404 (213) 829-2991

Downtown Lab: 606 So. Clive St., Suite 1120-1122, Los Angeles, Cal. 90014

(213) 629-5435 (this is same address as before for the downtown lab).

COMPENDIUM OF SYNTHETICS with approx. 1700 entries is in Press right now. It was prepared by M.J. O'Donoghue of Great Britain, an elected Fellow of the British Assoc. This will be the most complete sourcebook on synthetics to date. For information contact: Joel Arem, P.O. Box 2563, Hyattsville, MD. 20784. Price not yet available.

MARKETPLACE COMMENTS by Joel E. Arem, Ph.D.

We are all seeing the development of major interest in colored stones in the U.S. I hear of jewelers offering andalusite, colored beryls, wide range of tourmaline colors. Top price for best stones still seems to be offered by Europeans. Interest in rare gems also picking up. Some monster stones have been cut recently, such as 20,000 carat blue topaz (will go to some museum, probably Smithsonian), 130 ct. magnesite and cuprites between 100 and 200 cts. Benitoites will continue to rise in price - supply of rough in hands of people who leased mine is now all cut up. There were about a dozen stones in the 2-4 carat range - all sold. There is no more of this material, unless thousands were put into mining the locality (\$). I have recently seen some fantastic yellow scapolite from Kenya, mostly terminated xls. but flawless. Some pieces will cut stones up to 30 carats. One elongated, prismatic, terminated xl. was approx. 3" long! Also new from Kenya: lavender scapolite. Color is deeper than "Rose of France" amethyst, but stones tend to be small.

Maybe appearing soon on the marketplace: top quality emerald from Pakistan. This material is remarkably free of inclusions, and color of best matches finest from Colombia. Also new from Pakistan: triphane (yellow spodumene), much darker color than Brazil ever provided, crystals so far up to approx. 200 grams flawless. Afghanistan is one of the most dangerous countries in the world, but potential for fabulous gem material is there and may be tapped in the near future. Look for: spodumene (all colors), tourmaline (greens, blue-green, pinks), lapis, californite (massive idocrase/grossular), ruby, emerald, beryls. Remember that many of the great ruby spinels of ancient times came from the Badakshan area. Also new, not really on the market yet (not enough of it): opal from Indonesia. I have market rights to essentially all of what is produced, perhaps 100 small stones per month. BUT - there are black opals there of unique character: very dark brown to black body color, with harlequin-type red flashes. Truly unique. White and jelly type also produced, but looks just like Australian (white) or Mexican (jelly).

REQUEST FOR HELP: In preparation, for release 1977, ENCYCLOPEDIA OF GEMSTONES. Basic properties and color photo of (current count) approx. 200 gem species, cut for the trade or by collectors. If you know of existence of unusual or very rare gems, please contact Joel Arem at above address. Especially need sizes of larger stones in private hands.

NEXT MEETING OF AGA: Wed., Oct. 13, 1976 at Community Room of Chevy Chase Savings & Loan, 4701 Sangamore Rd., Sumner, Md. (Little Falls Mall). Call S. Schwartzman for details.