

# DOUBLET WHICH SIMULATE EMERALDS

BY: IAN C.C. CAMPBELL, F.G.A.  
(INDEPENDENT COLOURED  
STONES LABORATORY)  
MEMBER AGA

## Abstract:

*Parcels of faceted emerald simulants, released into the South African market toward the last quarter of 1989, visually look like emeralds. If these composites are set with hidden girdles, an over-quick or careless examination could result in an incorrect identification. One parcel consisted of at least 80 carats of stones by weight, and it was from that parcel that a number were examined because of their comparatively large size and, in at least two cases (B & D in the photograph below), of convincing appearance to natural stones. Such stones have been seen in the past, but only singly or a few at a time - not in large parcels as recently seen.*

## Introduction:

A relatively large parcel of these faceted composites were offered to the laboratory's client for R80,00 per carat at trade level (approximately U.S. \$31,00/ct). The client was informed categorically that they were natural emerald doublets (in spite of size!), both pavilion and crown being natural emerald, and glued at the girdle plane. This in itself was strange, because the recoverable whole stones from the pavilions alone (in relation to the larger stones) would be significant in terms of both size and financial return. This was realised and an identification was called for. Afterwards the seller still insisted that the components (received from a source in Western Germany) were genuine emerald in spite of clear cut evidence that they were not.

Sizes ranged from sub-carat to in excess of 8,00 carats per stone. See figure 1. A = 6.098, B = 5.656, C = 8.754, D = 6.059 carats. C is shown in this photograph as being over-blue, although it did in fact have a strong blue overtone to its green body colour.

## Gemmological Test Results:

**Absorption Spectrum:** (Raynor variable slit, hand held spectroscope). Transmission in the blue to yellow wavelengths and varying degrees of strong absorption in the red to orange, and violet (and in some cases higher blue) wavelengths.

**Refractive Indices:** Relate to beryl - 1.570-1.574 to a high of 1.589-1.596 with birefringence ranging from 0.004 to 0.007.

## Microscopic Examination:

- i) Inclusions in all 4 stones compatible with beryl, and quite variable among stones: rough spiky ones, concentration of specks in cloud form, apparent irregular rough shaped negative inclusions (A facet cuts across one which appeared hollow - could have contained liquid.) Also orientated 2-phase liquid/gas inclusions and parallel tubes.
- ii) Spherical gas bubbles in some (but not all) cases at the junction plane.
- iii) In some cases green stained, surface reaching, internal fractures.
- iv) Blotches and specks of concentrated colouring matter in the junction plane of all stones, and streaks in one.
- v) Side view (immersed): obvious thin, concentrated colouring medium of unknown type. Comparatively thick in darker appearing stones.
- vi) Side view (immersed): Each segment colourless or very pale green to blue shades - one has a crown which has inclusions similar to a Zimbabwe type (very pale) aquamarine.

See figure 2 & 3 for general appearance of inclusions.

*Comments: This is by no means a new subject and has been reported on before. However the stone(s) could be somewhat misleading, and refractive indices do overlap with emerald. If the girdle plane is covered by a bezel type setting and is carelessly examined a mis-identification could be the result.*

Figure 2

Stone A. Beryl composite simulating emerald.  
As seen through crown.

Figure 3

Stone A from side, immersed.  
Striations in stone are reflections of tweezers.  
Note spreading at each end, of colouring matter at joint.

From: The South African Gemmologist  
Volume 4, No 1  
February 1990

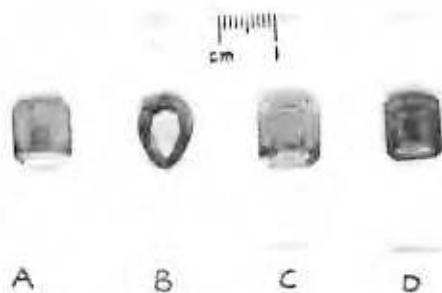


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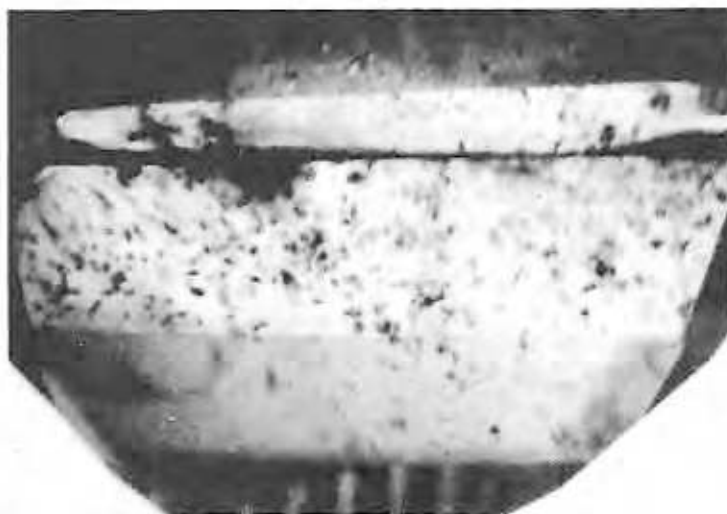


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# INFORMATION FROM NEWSLETTERS, ALERTS, ETC.

## ICA LABORATORY ALERTS:

No. 23, Nassau, K. Sept. 1989. *Weakly Radioactive Spinel Triplets*: Yellow-green colour (peridot simulation). Manufactured in Europe. Two layers colourless spinel cemented together with a green lead- and uranium-containing glass. The uranium provides the colour and the radioactivity. Although single stones are harmless, significant activity is given off by parcels containing many such stones. Be aware of this.

No. 24, Thibaudeau, G. Oct. 1989. *Glass Imitating Emerald*: Obtained for a relatively high price as thought to be a natural emerald. Gemmologically tested by Brodman Gemmological Laboratory in Montreal, Canada. Wt. 74,75 cts. RI. 1,54 approximately. S.G. between 2.28 and 2.38. Singly refractive. Green dye in fractures, mica flakes attached with soft glue together with very small crystals. Green dye can be removed. Large bubbles and curved striations internally.

No. 25, Huddleston, R.V. Dec. 1989. *Impregnated Black Opal*: Two broken pieces of polished black opal with mainly green and blue flash. 3.60 and 0.34 cts. Inert under LW and SW ultraviolet. Microscope (10 x to 60 x). Black substance in fissures. Result: Natural black opal impregnated with unidentified black substance which peels away on the tip of the probe (while under magnification). Treated to enhance the contrast of colour play and considered by Huddleston Gemmological Consultants to be fraudulent. Black substance not analysed.

No. 26, Bank, H., Henn, U. Nov. 1989. (ICA report Dec. 1989.) *Flux Grown Synthetic Red Spinel from USSR*: 13.14 cts. RI is 1,716 and SG 3,60 (both similar to natural) Coloured by Cr +. Absorption bands at 543 and 412 nm. Tension cracks which cause an undulous extinction. Black particles, probably representative of flux residues also observed under microscope.

No. 26 Update. Koivula, J.I., Kammerling, R.C. Dec. 1989. *Flux Grown Synthetic Spinel*

*from USSR*: Follow-up from Bank's and Henn's original report (page 27). Another one seen in U.S.A. and purchased in Denver, Colorado. 17.19 cts. Purplish red well-formed octahedron (one truncated octahedron point). RI 1,719. SG 3,58 ± 0,01. Fluorescence: Strong orangy-red under chelsea filter. Absorption (nm) - 400 to 450 (general), weak band between 580 & 630, fine line near 680, and fluorescent line at approximately 690. Dark brown to black flux inclusions, strain associated iridescent fractures internally. No water content (infrared spectrometry). Inclusion-free stones would be difficult to identify by conventional means.

No. 27, Bank, H., Henn, U. Dec. 1989. *Dyed Transparent and Translucent Quartz as Imitation for Emerald, Ruby and Blue Sapphire*: Artificial colouring in probably heat-induced cracks. Milky quartz for translucent material. Seen faceted, cabochoned and as beads.

From: The South African Gemmologist  
Volume 4, No 1  
February 1990



# European Gemological Laboratory

Institute for Certification of Diamonds and Precious Stones

Antwerp — New York — Los Angeles

July 12th. 1989

Concern: Technical details about the Yehuda treatment

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## Clarity up-grading

Black piques can be removed or converted into white gletzes by "deep boiling" and laser drilling.

Now, white gletzes can be removed or made invisible by Yehuda treatment.

The purpose of the treatment is to render gletzes or cracks invisible. Raising clarity grade from P2 to S1 or from S1 to VS. is generally achieved.

## Durability

Yehuda treatment increases the strength of the gletzed diamonds. The treatment is permanent, extremely strong and durable.

Once the treated diamond is set in a jewellery piece it will not be damaged by normal use or cleaning process, including ultrasonic cleaning.

The process may be reversed only by a very high temperature of 1000°F (during repolishing) and by "deep boiling" in strong acids, especially when combined with high pressure. In this event the stone can be retreated easily.

## Identification:

The treatment can be detected by looking for a faint rainbow seen at the profile of the invisible gletz.

This faint rainbow can be seen with the aid of a loupe or a microscope when examining from the bottom or the side of the stone.

It is easier to identify a treated stone than to find a VS or VVS in a stone.

When a rainbow occurs naturally, it can be seen at the face of a gletz and not from the profile.

NOTE: The EGL laboratories are allowed to accept and to certify such stones on the express condition that they mention in the comments of the certificate: "CLARITY ENHANCED TREATED DIAMOND"

30 West 47th Street/Room 205

New York, N.Y. 10036

# THE MOST COMMON MISCONCEPTIONS ABOUT FLUX GROWN RUBIES

BY: VIRGINIA L. CARTER

In 1987 I joined Judith Osmer as an active partner in the J.O. Crystal Company. Judith had started the Company in 1983 to produce and distribute her Ramaura Cultured Ruby. Things had gone well . . . in fact they were jumping when I got here. My job was to learn as fast as I could and to help continue orderly growth in the fastest growing big-little company in the West.

The misconceptions which are discussed below are not just attitudes which Judith and I have encountered in the trade. They are, in many instances, deep seated beliefs which some gem traders and jewelers hold, sometimes despite scientific and/or G.I.A. training. I have to confess that Judith has had to knock some of the ideas out of my own head!

So here they are, the seven most frequent misconceptions we encounter.

## 1) "In The Laboratory Anything Is Possible."

Well, not quite. In fact not even close! Judith is often asked to grow bigger rubies, cleaner rubies, different stones, cheaper stones, etc., etc. It is as if being in the laboratory makes all things possible. What seems to be missing is an appreciation of the fact that the immutable laws of nature apply just as firmly in the laboratory as elsewhere. These laws are as true in our laboratory as they are in any ruby mine. Judith cannot make just anything happen. She is limited by natural laws of science which have been painstakingly established over centuries. They have been discovered, not made. If you are smart enough to figure out how to apply them, (as Judith has in the instance of making the Ramaura Cultured Ruby), then you may be able to make things happen according to natural laws in an unnatural environment, i.e. the laboratory. The Ramaura Cultured Ruby is made by using the same natural laws which cause rubies to form in the earth. There are the same limitations of size and clarity. I wish Judith could beat the laws of physics and do better, bigger, clearer and more. Wishing doesn't make it so.

## 2) "The Inclusions In Ramaura Cultured Rubies Are Put There Intentionally."

This is probably the view of people who know flame fusion ruby and how unlike natural ruby it appears. When they discover that Ramaura rubies have a host of different inclusions, many of which look very much like natural inclusions, they look at Judith with wonder and tell her how smart she is to do that. Judith would love to take credit but knows that you know better. Her ruby is grown by establishing a set of conditions in the lab which are closely similar to those which occur during the formation of natural ruby. The Ramaura Cultured Ruby grows because it must, in the way it must. Sometimes it grows too fast, trapping flux inclusions. Sometimes it develops internal cracks creating fingerprints and feathers. Just like natural ruby, the fewer the number and prominence of the inclusions the more valuable is the stone. So it isn't that Judith puts inclusions in her stones. She works to find growth mechanisms which minimize their numbers.

## 3) "Lab Grown vs. Flux Grown vs. Created vs. Cultured . . . They All Mean Pretty Much The Same Thing."

There are shades of meaning in these varied adjectives and all are now in common use to describe rubies which are not of natural origin. Those shades are important to those of us who want to convey as much accurate information as possible, as simply as possible. Rubies are produced in the lab using two methods, flux and flame fusion. The latter results in very inexpensive ruby which bears only a passing resemblance to natural stones. It is produced in large volume for use in inexpensive jewelry and in industry. To say "Lab Grown" fails to distinguish between these two methods. "Flux Grown" implies "Lab Grown" but the term is only understood by scientists and gemmologists. To say "Created" is equivalent to saying "Lab Grown" with the added feature of sounding omnipotent. We have settled upon "Cultured" because the general public knows that it means people were involved in the process, that the product is the same as its natural counterpart and that it grew out of a nutrient solution, (as pearls do).

## 4) "These Stones Will Swamp The Market!"

Flux grown rubies and emeralds make up, at the very most, 1% of the number of their natural equivalents which are newly mined and faceted each year. The growth technique is both



difficult and costly. In a way our Ramaura Cultured Rubies are boutique items. World wide production of flux grown stones not only doesn't swamp the market . . . it cannot keep up with demand.

5) "Corundum Is Corundum Is Corundum."

If you compare flame fusion with flux grown ruby and cannot see the difference, then save the money and buy the cheaper goods. It is argued by gemmologists with less self interest in this than I, that the reason the Ramaura Cultured ruby looks so much like a natural is because of the low number of dislocations in its lattice structure. Unlike flame fusion ruby, which is produced by quickly melting and refreezing aluminium oxide and chromium, the Ramaura is grown by slowly precipitating a ruby from a supersaturated solution. There is no seed, no forced growth. The crystal lattice forms with great regularity. With few dislocations there is little to scatter light. Looking into the resulting stone you are able to see its heart.

6) "They' Make Us Put A Dopant Into The Ramaura Cultured Ruby"

Judith dopes her ruby to help in its identification. The fluorescence is shifted toward yellow-orange when compared to natural ruby fluorescence. All Ramaura Cultured Ruby is doped. None have ever been on the market without the dopant. The test is a good one but must be applied carefully and always in direct comparison with a natural ruby. Some Ramaura rubies show the effect more strongly than others because they grew late in the growth cycle when the concentration of dopant was highest in the flux. All Ramaura rubies show the effect of the dopant. In applying the test be careful to darken the room, use a mineral lamp at long wavelength and do a direct one-on-one comparison with a natural ruby. No one makes us add the dopant. We do it because we are proud of the Ramaura. We know that in the long run it would be harmful to the industry and to our business if Ramaura Cultured Rubies could not be distinguished from naturals.

7) "If You Make Them, They Should Be Cheap!"

Compared to the cost of natural rubies the Ramaura Cultured Ruby is not expensive, only 5-10% of the price of a natural of comparable quality. The price ranges from \$50 to \$350 per carat depending on size and grade. Ramaura rubies are relatively expensive to produce.

They require a very pure platinum crucible in which to grow. They take months to form and all that time they are sitting in electric furnaces at around 3000 degrees F. The power bill is enormous! The cutting yield is low since the cutters must select regions from the rough to avoid as many of the inclusions as possible. When you add up the numbers it is easy to see why \$135/ct for a 1 carat Fine grade Ramaura is a very good deal.

Business was at an all time high in 1989 and so far in 1990 things look even better. That being so, it is quite likely that sometime soon, if it hasn't already happened, you will be running into a Ramaura Cultured Ruby in connection with your own business. We hope it is a happy and profitable encounter.

## ABOUT THE J.O. CRYSTAL COMPANY

The J.O. Crystal Company was formed in 1983 by partners Judith A. Osmer and Virginia L. Carter, to produce rubies for use in fine jewelry. The Company is a pioneer in the field of duplicating natural gemstones in the laboratory. With the head office in Redondo Beach, California and production laboratories in Long Beach, California, the Company grows and distributes the Ramaura Cultured Ruby worldwide. A companion product, the Gilson Cultured Emerald is also distributed by the Company.

Public interest and acceptance of the Ramaura Cultured Ruby is paralleling the remarkable history of widespread acceptance of cultured pearls around the world in the first several decades of this century.

### JUDITH A. OSMER

Ms. Osmer was employed for 25 years as a research crystal grower specializing in laser materials. She attended U.C.L.A., majoring in Physical Sciences/Mathematics, and worked for the Hughes Research Laboratories and the Aerospace Corporation in Los Angeles. Her list of publications includes more than a dozen research papers on crystal growth.

The flux technique by which the Ramaura Cultured Ruby is grown is unique. It produces a

ruby which grows by spontaneous nucleation in a manner very similar to that in which natural ruby grows. The Ramaura Ruby is considered by experts to be the most natural appearing of all the created gemstones.

#### VIRGINIA L. CARTER

Ms. Carter has recently moved from silent to working partner at the J.O. Crystal Company. Her most recent position was Senior V.P. of Drama, Embassy Television in Hollywood. Her 14 years in show business were preceded by a decade of research in experimental physics at the Aerospace Corporation in El Segundo, California. Educated at McGill University in Montreal, Canada, and at the University of Southern California in Los Angeles, she is the author of more than 20 technical papers and is the recipient of a number of Emmy and Peabody awards for her work in television.

FOR FURTHER INFORMATION: Contact Virginia L. Carter, The J.O. Crystal Company, 111 Bia La Circula, Redondo Beach CA, 90277 PH# (213) 437-1645



*Judith Osmer*



*Virginia Carter*

# TRUTH IN APPRAISING

BY: THOMAS CHATHAM

PRESIDENT, CHATHAM CREATED GEMS  
PRESIDENT, GEMSTONE CRYSTAL  
GROWERS ASSOCIATION

In the late 1970's and early '80's we had natural gemstones, and those that were not natural. "Non-natural" stones were anything from glass to synthetic ... all of which were considered fake by some people's understanding.

Because "demand is the mother of invention" we found ways to turn white topaz blue, cloudy sapphire clear, fractured diamond less flawed (to the eye), rubies a little more red, emeralds a little less oily, and laboratory grown gemstones a lot more saleable. Without these improvements to availability, the industry would certainly have far fewer products to sell, and the consumer less to buy.

But these developments have not been without problems. Change has occurred so rapidly, our industry has advanced product without adequate terminology and explanation. So, for the past two years, a coalition of industry representatives have worked to produce a manual aimed at helping the retailers describe to the general public, in simple and clear terms, enhancement developments.

Laboratory grown gemstones and imitation stones have been, and continue to be, a controversial part of this effort. One of the hottest issues concerns the word "synthetic". There is growing agreement among the various trade organizations, including the Federal Trade Commission, that the word synthetic is misused, badly misunderstood, and counter productive. One word with two almost opposite meanings. A gemologist may correctly identify a synthetic as a gemstone that possesses the same properties as natural, but the general public has an altogether different opinion. Common usage (including dictionary definitions) interprets synthetics to mean artificial or imitation products.

And this issue becomes counter productive when it interferes with a sale, or creates problems after a sale (perhaps even "returns"). When a consumer receives an appraisal marked

"synthetic", their immediate reaction is to believe they were misled by their salesperson. At the point of purchase, they were satisfied the laboratory grown gemstone was "real". Now they believe it is an imitation.

Finally, the jewelry industry is on the threshold of adopting new terminology to describe gemstones born in a laboratory: "Laboratory Grown" gemstones. Although this would seem to be a rather obvious choice, the results should mean increased retail sales. Not having to use the term synthetic will allow salespeople to present more positive, encouraging information to customers. Lost sales will turn into profits gained. Everybody wins.

This new terminology for the 90's is being supported and promoted in a supplemental manual written under the auspices of the Jewelers of America. To be truly effective, this manual needs to be endorsed by all segments of our industry. This must include appraisers. Granted, all gemologists have been taught that laboratory grown gemstones are indeed synthetic. And gemologically they are. But we must keep in mind, the general public has not had the benefits of a gemological education. Appraisers are not being asked to alter the ultimate description and value of a gemstone; rather, make contemporary consumer perceptions. After all, isn't our objective increased sales and more satisfied customers?

The bottom line is this: gemologists are being asked to consider the consequences of their actions - - or in this case words. You have always played an integral role in the fine jewelry industry. And hopefully, you will continue to do so. The consuming public relies on our knowledge and on our honesty. They are too often confused by the facts, and alarmed by the negative publicity our industry has been subjected to (much of which has been warranted). There is enough doubt and suspicion already. We don't need to create any more. Consumers want, no, need to know what it is they have purchased. They most certainly have the right to an appraisal that is fair, accurate, and understandable. It might not be an appraiser's responsibility to help make a sale, but it certainly isn't appropriate for an appraiser (or appraisal) to be at fault over the loss of a sale.

So come on! Let's eliminate appraisals that are akin to a prescription a doctor gives his patient - - where only the trained eye of a professional pharmacist can decipher its meaning. Spell out what a lab grown stone is and where it comes





from. Help that customer comprehend what they own. Jump on the jewelry industry bandwagon. Support "Laboratory Grown" gemstones, and don't use the word synthetic.



# SOME UNANSWERED QUESTIONS ABOUT 'NUKED' BLUE TOPAZ

BY: JANE EVERHART

Though the Nuclear Regulatory Commission (NRC) has recently taken some positive steps on the "nuked" blue topaz issue - namely, licensing two distributors to test and distribute imported blue topaz and thus, hopefully; controlling to a certain extent the "super hot" stones that have been filtering in from other countries from time to time - there are still unanswered questions that give rise to misgivings about this product.

For instance, what made the NRC decide that 15 bequerels of radioactivity is OK for the human body to absorb and not 16 or 17 bequerels? And do you really trust the NRC to decide for you how much radioactivity your body can absorb? This is the same genre of folks who brought you Agent Orange, diethylstilbestrol (DES) and the Dalkon Shield.

The other day I was holding on to a strap on New York's subway when I saw, sitting below me on her mother's lap, a tiny Hispanic child, perhaps nine months old, wearing tiny earrings in her pierced ears, as is the custom in many Hispanic families - and I recognized the eery glow of London blue topaz. I looked at her small head and wondered how many millirems it could absorb, what amount of radioactivity was pulsating into her tiny lymph nodes, and I tried to remember what I had read about the amount of millirems of radioactivity permissible per pound of body weight.

I have other concerns, too. The NRC won't allow nuked gems to be cut and polished in the U.S. on the grounds that inhalation of the radioactive dust is dangerous. But there is no such rule in Thailand, where much of the blue topaz is being cut today, and where young children do much of the polishing.

And what about the gems that need to be held in lead containers for as much as 10 years before they can be released - where are they being held? Or are they being dumped into Third World countries as are so many of our other unwanted products?

**Consumers Should Be Told**

Another important question the government needs to address is that of disclosure. Consumers should have a choice of whether they want to wear nuked gems or not, and if they aren't being told, they don't really have an informed choice.

I'm also concerned about the spurious assurances of safety that appear in various industry publications. One publication recently ran the headline "BLUE TOPAZ IS SAFE, SAYS NRC". What the NRC actually said is that they *only* consider blue topaz safe if it comes from an NRC-licensed reactor or distributor.

But even the NRC can say some pretty foolish things at times. For example, at one seminar, NRC's John Hickey said that the risk of wearing blue topaz for an X period of time is equivalent to the risk of driving from New York to California in your car. Well, wait a minute. When I get out of my car after a cross-country trip, that's the end of it. The risk is over. But radioactivity is stored in the body's organs and stays there forever (your body doesn't "cool down" with time as inert matter does).

Nor does your cross-country car trip have an effect 20 years from now. But cancer is a slow-developing disease; the radioactivity doses you get *now* could result in cancer 20 years down the road.

## Beware of False Comparisons

Or take the chart that recently appeared in one magazine, comparing the risks of wearing blue topaz to the risk of being exposed to natural gas heaters and fertilizer products. That's about as foolish as saying that jogging in Central Park at night is safer than sticking your head in an oven. Beware of such spurious comparisons. They can engender a false sense of security.

Moreover, that particular chart was prepared by an employee of the University of Missouri's nuclear reactor, which does most of the nuking of gems in this country and makes a huge profit doing it. The chart is also attributed to an organization called the National Council on Radiation Protection which, I believe, is a public relations group. One would question the objectivity of both of these sources.

## Scientific Testing Needed

Another thing I've been concerned about is that no scientific tests have been done on the effects of wearing gems on a living organism. Why

hasn't the F.D.A. tested irradiated blue topaz on laboratory rats? They've done it with saccharin and many other substances, both external and internal. Even cosmetics are tested on laboratory animals. How much effort would it take for scientists to tape blue topaz of various radioactivity levels to the skin of a laboratory animal and see what effect it has on the animal after a month, six months or a year?

Until such tests are done, all we have to go by is the research done by scientists at atomic plants. A recent article in the *New York Times* reported that Dr. Alice Stewart, a British epidemiologist, discovered as far back as 1975 that workers at one atomic plant, exposed to radiation levels less than half the federal safety limit of 5 rems per year for atomic workers, suffered a third more than the expected levels of pancreatic cancer, lung cancer and multiple myeloma, a rare bone marrow cancer. The government suppressed this information for years, Dr. Stewart charged.

It's better to be safe than sorry. I say, test the material first and then sell it. But not until retail jewelers say this - demand it, in fact - will there be any conceivable action.

#### **A Journalist's Responsibility**

I believe it is a journalist's responsibility to bring questions of this kind to the attention of readers: it is an ethic that has brought down a lot of criticism on my head from those who would rather these questions be kept under wraps. A whistle-blower's lot is generally not happy one.

While it is true that journalists can sometimes change history, as Woodward and Bernstein did when their Watergate articles toppled a presidency, usually it's a thankless job and sometimes a dangerous one. After my series of articles about nuked blue topaz were published, I received some veiled threats to my life. They concerned me enough to alert my family.

It is apparently an occupational hazard. Some 53 journalists were killed worldwide in 1989 - twice as many as in 1988. The *New York Times* wrote in an editorial titled "Killing the Messenger": "Journalists who are risk takers are witnesses who provide the first rough draft of history. When they are silenced, jailed or censored, understanding is dimmed and information lost."

And the *Wall Street Journal* wrote in a recent article defending journalists: "Journalists

rightly believe that in a democratic system they have a responsibility to educate and inform the public . . ."

I'm looking forward to the time when most trade publications feel that way, too, and aren't afraid to tackle these risky topics with courage.

*Jane Everhart is the editor of the Rapaport Diamond Report, a subscriber - supported publication. She has been covering the jewelry industry for 25 years and has won several awards from the New York Business Press Editors Association for her articles - most recently, first prize in the category of Reporting on Controversy for her article "Nuked Blue Topaz - How Safe is Safe?"*



Office of the President

**An Open Letter to Accredited Gemologists Association Members**

Spring, 1990

Esteemed Colleagues:

I am writing to extend a personal invitation to join me and our fellow gemologists for the International Gemological Symposium in June of 1991. By now, many of you have read about this celebration of GIA's 60th anniversary. Its theme, **FACING THE FUTURE**, sets the tone for an educational event that will be worldwide in purpose, scope, and impact.

Symposium will offer us the opportunity to assess industry-specific concerns and progress, as well as to share global thinking and gemological camaraderie. Many of the sessions are directly focused on issues that you confront daily. In **FACING THE FUTURE** you will find:

- more than 50 presentation and panel discussions,
- over 100 of the industry's most acclaimed figures,
- highly significant topics related to **Diamonds, Colored Stones, Jewelry History, Jewelry Design and Technology, Information Systems, Economics, Marketing and Research,** and
- dazzling social events at very special locations.

You belong here. Symposium will be the educational event of the decade . . . one you certainly must attend.

I look forward to seeing you in Los Angeles, June 20-24, 1991.

Sincerely,

GEMOLOGICAL INSTITUTE OF AMERICA

William E. Boyajian

ps/ To be included on our VIP mailing list, act now. Contact our Symposium office:  
800/421-7250.



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*Gary Grelick*

## **GRELICK CORPORATION NAMES OFFICERS**

Buffalo, New York - Grelick Corporation is the new parent company of Bomi Gemstone Importers, the international jewelry business founded in Buffalo 55 years ago.

Robert A. Grelick is president and AGA member Gary R. Grelick is vice president of the corporation, and the two are partners in Bomi, which has expanded its corporate headquarters here, with new offices on the main floor of the Ellicott Square.

In addition to its Buffalo operations, Grelick Corporation has export offices in Hong Kong, Thailand, Israel and Sri Lanka.

Gary Grelick is a graduate gemologist with degrees from the Gemological Institute of America, Great Britain and Japan. He is author of the reference book "Diamond, Ruby, Emerald and Sapphire Facets," now in its fifth printing.

Send Inquiries to: Gary R. Grelick  
(716) 856-4108



*Robert Grelick*



# ANTONIO C. BONANNO ET AL A RARE "GEM FAMILY"

Antionette BONANNO Matlins  
(S. Woodstock, Vermont)  
Kenneth BONANNO  
(Fredericksburg, Virginia)  
(Karen BONANNO Wright,  
Phoenix, Arizona)  
Kathryn BONANNO  
(New York City)

The name Antonio C. Bonanno is well known to members of the Accredited Gemologists Association and, indeed to gemologists throughout the country. One of the founding fathers of our association, and recently acknowledged in *The Diamond Registry* (a New York-based industry newsletter) as "one of the founding fathers of the science of gemology," Tony has been working with gems and minerals for over 50 years, and teaching and appraising since 1950.

For those who don't yet know Tony, he is the Founder and President of National Gem Appraising Laboratory outside Washington, D.C., a firm noted for forensic gemology, photomicrography, appraising and identification of gemstones. He is also Director of the Columbia School of Gemology, which has been teaching gemology to Washington area jewelers, hobbyists, and collectors since the mid-1950's.

Tony's story is an interesting one. While in elementary school, he was introduced to chemistry by a schoolmate (who would also be a lifelong friend). He practiced his hobby in the basement with "chemicals" he purchased from the local druggist for anywhere from 5 cents to 10 cents a packet (they came in packets similar to parcel papers used by gem dealers today). One day a neighbor moved and Tony went looking through their trash to see if they'd thrown out anything he might want (scavenging is something at which Tony is still adept!). Sure enough, he found some rocks which he took to school to have his science teacher, (yes, he says, they really had a 'science' teacher in junior high school in Washington when he was a boy) identify. She was unable to identify them, but suggested that Tony take them to the museum

(what is now called the Smithsonian, but was then called the National Museum).

He did just that, and, upon arriving, went directly to the curator, Dr. Foshag, who proceeded to identify the rocks and then show him around the Hall of Gems. "When I saw some of the fantastic specimens there," Tony tells, "I couldn't help asking Dr. Foshag if the museum by any chance had any 'duplicates' he could give me for my collection (which at that very moment I decided I wanted to start). Dr. Foshag sent me to see a wonderful man James Benn, who gave me my first three 'real' specimens - a fantastic cluster of calcite crystals that I still have; a piece of radium ore which I thought was worth millions since radium was selling at the time for \$6 million an ounce (of course what he gave me was worth about a nickel), and a third specimen I can't remember."

From that time on, Tony went to the museum on a very regular basis to look at the gems and minerals. One day a boy scout approached him while he was studying one of the exhibits and invited him to join the museum scout troop. "I was I tough Italian kid and there was no way I was joining any 'sissy' scout troop . . . until he mentioned that James Benn was the scoutmaster. That's all I needed to hear. I joined the troop because of Jimmy and because we got lots of free specimens from the museum 'duplicates'!

Tony developed very close relationships with both Dr. Foshag and Jimmy Benn. They instilled in him his passion for knowledge about the physical world and encouraged his study of chemistry and physics, geology, crystallography, mineralogy and, in particular, the study of gems. But there were a couple of incidents, in particular, that Tony recalls that really determined his future.

The first, he says, occurred shortly after joining the scout troop. He brought in his mother's "diamond" earrings for Dr. Foshag to see. "My mother was so proud of those earrings," he recalls. "They were one of her most prized possessions. You can imagine my shock, and indignation, when Dr. Foshag told me the stones were NOT diamonds, but colorless topaz!" Then, about a year later, he traded a local bookseller several fine, old books for several 'fantastic faceted gems' (of course, Tony thought he got the best end of the trade) and rushed in to show his wonderful treasure to Dr. Foshag. "Dr. Foshag didn't even have to examine them," recalls Tony. "He knew immediately what I had. DOUBLETS, he pronounced. I was furious. It

"Dr. Foshag didn't even have to examine them," recalls Tony. "He knew immediately what I had. DOUBLETS, he pronounced. I was furious. It was bad enough that my mother had been duped, but I swore at that moment it would never again happen to me. That's when I made up my mind to learn everything I could about gems. Dr. Foshag and Jimmy Benn never saw the end of me from that day on. That's when my real pursuit of gemology began!"

Tony has never stopped studying, collecting, and teaching. He was Charter Member #8 of the Lapidary Club of Washington, D.C. (which became the Washington Gem and Mineral Society), and was one of the first Americans to become a Fellow of the Gemmological Association of Great Britain with distinction.

Most of us are familiar with the many honors Tony has been bestowed over the years. What comes as a surprise to some, however, is that while he was working so diligently in the field of gemology he also produced six children. And gemology must have been in the blood, because today four of Tony's six children are actively involved with gems and jewelry. They often work together, but they also bring their own unique, individual interests and talents to the field.

We decided to talk to each of them and find out what they are doing today, what attracted them to the field and what their future goals are. We will start with the oldest (sorry, Antoinette, to reveal this fact) and proceed to the youngest.

#### Antoinette BONANNO Matlins

"From the time I could walk until I left for college, I can't think of any place I would rather have been than on rock collecting trips with Dad, or accompanying him to the lapidary and gemology classes he gave four nights a week," says Antoinette. As an adult, however, she chose a different path for a career (which began as a remedial reading teacher, then veered off into advertising and marketing where she became a vice president in a major New York advertising agency). "I never even considered the field of gems and jewelry professionally," Antoinette admits. "It was the 'investment' scams that began to appear in the mid-seventies (ending in disaster for so many by 1981) that got my attention, and started the adrenalin flowing," she remembers.

"Understanding the business as I did, it was hard for me to imagine how so many seemingly intelligent people could fail to see how risky

gem investment schemes might be for them. In discussing it with my husband one afternoon and commenting on the stupidity of it all, he helped me realize that it wasn't so much a matter of stupidity as it was a result of ignorance.

That started Antoinette thinking, and it didn't take long for her to discover one important reason why there was so much ignorance on this subject in particular. She discovered there were books for the layperson about everything EXCEPT GEMS.

That's when Antoinette got the idea that she and her father should write a book. A book she thought was not only needed, but in the light of the 'investment fever,' also very timely. And as a result of writing the first book, which led to a number of media appearances and lectures, she began to see that there was another area in which she might be able to serve an important function. Educating the public. And she's thrown herself full-time - and full-force - into doing just that, and more. Antoinette has taken an active role in educating not only the public but the trade as well, through articles in consumer magazines (for her latest, see Conde Nast's TRAVELER, May 1990, trade publications including the gemology column in National Jeweler, workshops, lecture tours, media appearances, and last but not least, the important books she and Tony have written.

In terms of books, Antoinette convinced her father (and that was no easy task) to work with her on their first book, published by Crown Publishers and titled THE COMPLETE GUIDE TO BUYING GEMS. "But he wanted to write the quintessential gemology textbook, and I wanted to write something readable and practical for the layperson. It was a constant tug-of-war, but I won," Antoinette beams. And anyone who knows Tony knows what an accomplishment that was in and of itself! In all seriousness, Antoinette believed that there was already enough technical material, but virtually nothing for those without a scientific inclination.

Antoinette's goal was to fill the gap. So the next thing she knew, she found herself catapulted into the gem and jewelry industry. Six months after publication of The Complete Guide, she resigned from her prestigious advertising position to focus full-time on her new goal. She and her husband set up their own publishing company, GemStone Press, to publish other books on gems and jewelry

written by Antoinette and Tony, as well as other authors (their books are distributed by Van Nostrand Reinhold). Their first publication was a revised, updated softcover edition of The Complete Guide, titled JEWELRY & GEMS: THE BUYING GUIDE (\$14.95, now in its fifth printing with 100,000 copies in print). This was followed by another "first" this past Fall, GEM IDENTIFICATION MADE EASY (\$29.95) a non-technical book for the jeweler, serious collector, and beginning gemologist on gem identification, which they've succeeded in simplifying. Initial reviews have been outstanding. Their latest is ENGAGEMENT & WEDDING RINGS: THE DEFINITIVE BUYING GUIDE FOR PEOPLE IN LOVE, which has just been published, a book written to take couples through the entire process to make it more enjoyable . . . to "remove the fear and restore the romance". And, we've been told, two more books are in the works.

Antoinette keeps a schedule that many would consider impossible, but, she says, she has to make up for lost time. In addition to the books, she relentlessly produces articles, press releases, and letters, and meets a full media schedule to make sure people are kept well informed and up-to-date. She makes frequent appearances on national TV including shows such as Good Morning America, The Today Show, Regis Philbin's Shows, Hour Magazine, as well as numerous local and regional TV and radio programs. She was selected by N.W. Ayer this past fall to be the media spokesperson for DeBeers.

Her articles and comments have appeared in publications such as Gems & Gemology, National Jeweler, Jewelers Quarterly, Gems & Jewelry, Aurum, Asian Jewelry, Tiffany Magazine, Forbes, U.S. News & World Report, Business Week, SAVVY, Brides, Modern Bride, Changing Times, Lears, SELF, The Robb Report, and she wrote the chapter on "Gemstones" in the just published Encyclopedia of Investments, 2nd Ed. (Warren, Gorham & Lamont, N.Y.), to make sure people considering gems as investments were fully aware of the complexities and risks.

What she loves most, however, is lecturing and giving workshops. "I love to share with my audiences what's going on in the jewelry business, to describe everything from the world's most exciting gems, to unusual pieces that have come up for auction, to new gems making their debut in Tucson (like to Paraiba tourmaline), to the latest treatments or scams,"

says Antoinette.

She is represented by two national lecture bureaus, and her schedule includes major shows such as the AGTA show in Tucson, the Dallas Market Center Show, and the Chicago Jewelers Show as well as "spouse" programs for major corporations, Royal Viking and QE2 "World Cruises," and women's and garden clubs. Following this year's Tucson show, she was booked by one of her lecture bureaus for a four-city tour in Northern California -- San Rafael, Sacramento, Walnut Creek and Oroville. She was amazed at the size of the audiences -- her smallest was about 400 people, and her largest was almost 2000 (at the Sacramento Civic Center, which she admits was her largest ever, and gave her a real case of stage fright). But despite the occasional stage fright, "It's exciting to know that so many people are interested in gems and jewelry," she adds. "I love to answer their questions and open their eyes to all the alternatives available today."

When it comes to trade workshops and lectures, Antoinette also feels it's important to impress upon her audience the need to get out into the world to know what's really going on. "I'd never miss Tucson," she says "and I try to view every major piece coming up at the "Magnificent Jewelry" auctions held each October and April in New York, and when time permits, in Geneva. I also usually attend the Watch, Clock and Jewelry Fair each year in Basel."

According to Antoinette, "It's the only way to keep your finger on the pulse of our industry -- to get a feel for the trends, observe new design techniques, keep up with new gem materials, and truly understand quality differences and prices. For example, the industry price guides, while reliable for most of what you will encounter, aren't reliable when it comes to gems of exceptionally rare quality and/or size," she stresses. "When it comes to such gems, auctions are one of the primary sources today, and the only place in some cases where one can find a 'comparable.' If you've actually examined such pieces, you'll be in a position to know how to evaluate another that might be similar, should you need to. However, if you've never viewed one, you may do your customer or yourself a disservice by over- or under-evaluating it. I recommend going to the major auctions to view important gems, make notes in the catalogs, and then keep them in a library for reference," she advises.

And if what we've described isn't enough, there are two more areas that keep her busy: working



with major retailers and industry organizations in the areas of staff training and developing consumer information; and conducting gem and jewelry searches for private clients.

In the area of staff training, one of the most innovative retailer programs she's been involved in is the J.C. Penney's direct-broadcast training. She's done three "direct broadcasts" where she is taped live in Dallas and appears simultaneously in J.C. Penney stores all around the country. A series of regional, in-store workshops for sales staff are currently being planned.

And with regard to her gem searches, they run the gamut from the mundane to the sublime, but this is the area that has shown the greatest growth recently. She attributes this to all the work that has gone into everything else she's been doing. It's taken time and perseverance, she told us, and more 18 hour days, seven days a week, than she cares to remember. But just prior to Christmas, she told us, she had a \$750,000.00 week ... with just one client. "Dad, Karen and Kathy were all involved with me on this one. Possibly our most exciting 'family affair!'"

When asked "How do you do it all?" she simply replies, "I love what I'm doing ... and Dad passed on to me a real passion for the field. It's really great to be able to do something you really like."

#### Kenneth BONANNO

Ken demonstrated an interest in science at a very early age. He was conducting chemistry experiments in the basement of his home while still in elementary school, and he helped build a car from the ground up with a neighbor when he was only 12. He likes retailing, however, and so he went into partnership in an antiques business. He became increasingly interested in gems as more and more customers became interested in antique and estate jewelry.

Ken decided he needed to study gemology and so he enrolled in his dad's gemology course, at his school - Columbia School of Gemology - where he earned the title "PG" (Professional Gemologist), and then went on to take his examinations from the Gemmological Association of Great Britain, becoming an FGA (Fellow of the Gemmological Association). He set up a laboratory for his own use (he doesn't do appraisals) and focuses his time on buying and selling fine antique and estate jewelry. "I love older pieces because the workmanship is

usually so fine. I really appreciate the fine detailing -- the use of enamelling, engine-turning, engraving, milgraining, granulation, and so on," Ken explains. He also points out that in his opinion, while diamond quality may not be as high or as well-matched in some older pieces, they often have a more interesting or distinctive character than most of today's diamonds. And, when well-proportioned, he likes some of the old-European cut and old mine-cut diamonds very much. In terms of colored gems, he enjoys the variety of stones used in older jewelry, and the quality. "I've seen some very fine sapphires and rubies, demantoid garnets, and red spinels in old pieces, the likes of which you seldom see today. Of course," he adds, "often the stones aren't what they appear to be, but I think I have a somewhat different attitude than many when I encounter something especially well 'taken' ... I have a real appreciation and, to some extent, respect for their ingenuity," Ken laughs.

After all is said and done, Ken's acute eye and scientific background have given him an unusual ability to recognize and evaluate the unusual and unique. And for him, that's what it's all about.

#### Karen BONANNO Wright

Karen became involved in gems and jewelry in early 1974 when she took her father's gemology course. She was the first of Tony's children to formally study gemology at his school. "It was a dreadful experience," Karen recalls, "because he constantly called on me to answer questions and if I didn't know the answers, he embarrassed me tremendously in front of the class. He expected me to know ALL the answers since I'd been around it all my life!" Somehow Karen survived, took her examinations and received her PG title and, you guessed it, her FGA.

Now she was faced with the question, what was she going to do with her gemological diplomas? She really had no idea and, as a widow with two small children, was concerned about going to work full-time. A friend and fellow student discouraged her from staying home and letting her mind stagnate, as he put it, and encouraged her to do something in the field so that she would keep her mind stimulated. Thus, in October 1974, Karen started working with her father in his appraising lab and school of gemology. "He wasn't really my first choice for a job," she admits, "but then I decided I'd never get fired if I had to take off work with sick kids, or whatever."

Or, so she thought. As she explains, "working with my 'genius' father -- as so many people described him to me -- was NOT (and still isn't) easy! He always expects me to know what he is thinking and to have all the answers. For example, he expected me to know a diamond had been lasered, even though I'd never seen a lasered diamond, and so on. I QUIT five times during the first six years together. But if you talk to him he'll tell you he definitely FIRED ME!"

Whatever the case, Karen always returned to work within a couple of days and is grateful for the wonderful opportunity she has had working with her very special father. She truly enjoys what she's doing and is very proud of what she's accomplished in the field. First, she's especially proud of the diploma she earned from her father's school, which she says was a harder achievement than passing the exam for the FGA. She joined AGA and became a Master Gemologist Appraiser and is now a Senior Member of the American Society of Appraisers. She is also a member of the Association of Women Gemologists' and a recipient of their "Diamond In The Rough" award.

But the award she enjoyed most was an all-expense-paid trip to London. "I entered a contest in Tucson a couple of years ago," she tells us. "I had to appraise a suite of 'crown jewels' and jewelry belonging to the 'rich and famous.' I won the contest by arriving at a valuation that came closest to its actual value. The London trip was wonderful. I spent lots of time viewing the British Crown Jewels, meeting with colleagues at the Gemmological Association, and visiting pubs."

Besides doing appraising work at National Gem Appraising Laboratory and teaching at Columbia School of Gemology, Karen also works two days a week for a local retail jeweler, doing appraising, and does trade shows across the country. "I think having retail experience is essential for a complete understanding of the field as an appraiser." And," she continues, "I've learned an incredible amount by being out in the market place, working the gem shows." Karen suggests that more people in our business should spend time at trade shows. "I have a much broader knowledge of the dealer trade," she explains, "and how it works, what's available (and who has what) as a result of working these shows (many know her from "Day Gems"). She also sells loose diamonds and colored stones and agrees that the most exciting moment was this past fall when she shared with her father, Antoinette and Kathryn the thrill of

a \$750,000.00 sale. "If I could only have one of those every six months," she dreams. As we all do.

But the most exciting part of Karen's career is just beginning. In June, Karen got married and moved to Tempe, Arizona, just outside Phoenix. "I plan to open 'National Gem Appraising laboratory WEST' and a branch of Columbia School of Gemology, probably in Scottsdale. I think there's a real opportunity for an independent laboratory in this part of the country, as well as for a gemology school." She is looking forward to the challenge, although she admits she's a little nervous about it. But this is something she really wants to do. And she's looking forward to carrying on the Bonanno tradition in Arizona. And, she hurriedly adds, she would welcome help from any and all AGA members in her new neighborhood!

#### Kathryn BONANNO

Kathryn is the youngest of the Bonanno's, and the most petite. But despite her 5 foot/80 pound stature, she is making herself felt in New York City. Kathryn was recently brought into the firm of Habsburg, Feldman, Inc., as head of gem and jewelry valuations for the United States operation. Habsburg, Feldman, a highly respected Geneva-based auction house, is well known throughout Europe and has offices also in London, Paris, Tokyo, and Hong Kong. They opened a Fine Arts department in New York about 18 months ago, but the jewelry department is new. They expect their first important New York jewelry auction to take place in October.

Having started in the field taking her dad's gemology course (which by now should be no surprise to anyone), at Columbia School of Gemology - and earning the title "PG" (Professional Gemologist) there, she immediately took her examinations from the Gemmological Association of Great Britain, received her diploma, and became an FGA like the rest of the Bonanno family (and, like her Dad, with distinction). She worked in the laboratory with Tony for several years thereafter, doing gemological testing, appraisals, and as a teaching assistant.

Kathryn lived abroad for sixteen years (primarily in Italy, Hong Kong, and England), expanding her overall knowledge and experience even further until she returned to the U.S. and settled herself in New York City. She worked in New York "on the street" 47th



Street, of course), where, upon being mugged one evening on the corner of 47th and Sixth Avenue, she took off in pursuit of the mugger and retrieved her wallet. "That's when I knew I could handle New York," she smiles victoriously. She was recruited from 47th Street which, she's quick to point out, was the most valuable learning experience she's ever had, to be the gemologist for a very fine Madison Avenue jewelry salon where she remained until several months ago, at which time she joined the firm of Habsburg, Feldman.

"I really love the scientific side of gems," says Kathryn. "I'm perhaps more like dad than the rest of the family in that way. I'm also a lot like him in being something of a perfectionist, and in wanting to know the answers. And I'm determined to get them," she adds. We certainly can't disagree with her here -- some of you may remember Kathryn from the conference in Tucson!

She sees a tremendous opportunity at Habsburg, Feldman, which is already the third largest international auction house in terms of dollar sales. "Our goal is to set new standards as far as gem and jewelry auctions go. In addition to being very thorough and giving much more personalized attention to our clientele, we are planning to become much more selective than others. This may take some time, but I'm confident we can do it," she adds. "We want to build a reputation that will result in buyers and sellers alike having more confidence in buying and selling through Habsburg, Feldman than they currently do at most other auction houses. I think the days of dealers picking up gems and jewelry for virtually nothing are over. As more and more people outside the jewelry industry look to the auction house as a source of fine, beautiful jewelry, prices will get stronger. That's good for the seller." And there's still plenty of room for buyers to get "very good value," too, Kathryn believes.

Kathryn also spends a lot of time with her Dad, and with Antoinette and Karen, sharing information on what they've seen and what's going on in the field. "We have our own little 'network'," Kathryn points out, "that proves to be invaluable at times. Each of us has insight into different areas of the business, which we share with each other," she continues, "gemological developments and issues, wholesale trade, retail trade, consumer issues, trade publishing, consumer publishing, media and public relations, education, and so on." Kathryn shared with us that one day they plan to put it all together. But she wouldn't give any

hints as to just what they're planning.



*Tony Bonanno*



*The Bonanno Family at Tucson 1990*

## FOCUS ON DAVID ATLAS

GG, CG, ASA  
MASTER GEMOLOGIST  
APPRAISER

AGA member David Atlas has been a great supporter of AGA this past year. He has lectured twice for AGA along with Martin Rapaport on his specialty of old cut diamonds and proper diamond grading. David was secretary of his local AGS Guild and Vice-president of his local ASA chapter. He graded several ASA Senior Member exams as part of his Board of Examinor's duties with ASA and worked with Joe Tenhagen on reviewing the Master Gemologist Appraiser program for ASA. He was also a co-instructor in this program. "It was gratifying to see the man from Dialase in New York City come to speak at our AGA Conference this year as I believe I suggested this as a good topic and actually suggested who to contact on this subject. We had excellent press coverage for AGA by hosting this forum. AGA members also had a hands on look at not only clarity enhanced diamonds but at clarity enhanced emerald improved by this newest of treatments."

Besides the educational endeavors, David successfully traveled to London and to several cities in the U.S.A. to purchase estate jewelry which he uses in running his memorandum estate jewelry business which supplies many retailers all over the country.

As Philadelphia's "Consumer problem specialist" in the jewelry business, David's firm is kept busy examining diamonds that are contemplated for purchase or have just been purchases in order that consumers know they have been fairly treated. As wholesale jewelers they can remain objective since they do not sell their own items to members of the public. They also appraise and grade many loose diamonds for retail stores in advance of sale so that the gems can be accurately represented. Most recently they have been hired by the local District Attorney and by the FBI to appraise jewelry confiscated in drug raids. No doubt this will be a busy area of business in the future for big cities.

"There is no end to what we can see or learn. Every year brings us more information and experience. A sincere effort will be made to help AGA members if they have a question or two they need some help in answering."

## AGA MEMBER THERESE S. KIENSTRA

A GEMOLOGIST'S LIFE IN THE  
FAST LANE

Therese Kienstra had a busy 1989, beginning with the annual Tucson Gem Show where she expanded her library, adding an original first edition of *The Book of the Pearl* by Kunz and a first edition of *Chinese Jade Throughout the Ages* by Nott. In March she accompanied Anna Miller to Chicago to view all the collections at the Lizzadro Museum and an Egyptian Exhibit at the Chicago Art Museum. The next month it was on to Basel, Switzerland for the Jewelry and Watch Fair, then to Paris for a week of research at the Place de Vendome, Rue Saint Honore and Le Louvre des Antiquaries.

Therese moved her business to larger facilities equipped with fine laboratory conditions including controlled light temperatures, white walls, white desks and lab tables, the only other color in the room being black or gray. She spoke at Lindenwood College for a Valuation Science class, and later took the role of Chairman of the Gems and Jewelry Program for the American Society of Appraisers International Conference 1990. In August she attended the Chicago JA show and in September began her term as Saint Louis Chapter Secretary for the American Society of appraisers.

A week in New York began on Sunday with a summary presentation of Sothby's and Christie's Auction activity at a seminar for the Society of Jewelry Historians. The meeting, held at the Fashion Institute of Technology featured Francois Curjel, Ben Zucker, Ken Scaratt, as well as Bill Boyajian and Robert Crowningshield. She later attended a party at Ann Paul's (a gemologist for Christie's) given in honor of Ken Scaratt. Therese later viewed the Malcolm Forbes Faberge collection with the lady (Sarah Lichey) who appraised it. She then spent four days with her visiting museums, dealers and craftsmen.

In November Therese became Senior Member of the American Society of Appraisers.

1989 was a very busy year for Therese, and 1990 has been just as busy so far. It's interesting to know what our members are up to, and inspiring as well!



## FOCUS ON ANNA MILLER

Anna M. Miller, G.G., Master Gemologist Appraiser, A.S.A., has been a member of the Accredited Gemologists Association since 1982, the same year she co-founded the Association of Women Gemologists with former AGA member Elaine Baker. Miller served as a Regional Governor in AGA for three years and was a participant in numerous AGA conferences. She was in the second class of AGA members who took the Master Gemologist Appraiser courses and with the group that traveled to Los Angeles to take special instruction in Color Grading from Janice Mack.

Anna Miller is a member of the transition team for ASA that oversees the transference of the Master Gemologist Appraiser program into the American Society of Appraisers. Miller was course developer for Gems and Jewelry programs Levels I, II and III for the American Society of Appraisers Fundamentals of Value programs in 1985, 1986. She instructed those classes for ASA until the Gems and Jewelry portion of the program was incorporated into one overall personal property program. She is still an instructor for ASA in the personal property section.

Miller's first book "Gems and Jewelry Appraising: Techniques of Professional Practice" was released by Van Nostrand Reinhold in 1988. Her second book "Illustrated Guide to Jewelry Appraising: Antique Period and Modern" was released by VNR last December. Both books are leaders in their field, comprehensive, and with expert appraising advice to improve career potential. The books are required texts for the MGA program, used in Gemology schools and classes all over the U.S., and in the Canadian Gemological Appraisal Association classes.

Miller is working on a third book "Cameos Old and New" to be published in 1991 by Van Nostrand Reinhold; and is scheduled to co-author a book on gem values with John Sinkankas, the noted mineralogist.

Involved in international seminars and lecturing on gems, jewelry, gemology, evaluation and consumer buying, Miller has recently returned from 14 days in Cairo, Egypt where at the invitation of a major Egyptian/American company she gave an extensive seminar to

American expatriots and Egyptian nationals. In October, 1990, she will be in Victoria, B.C. to take part in a seminar, and Vancouver to address the Canadian Gemological Appraisers Association.

## SPOTLIGHT ON JAMES JOLLIFF

More than 40 years ago, Jim Jolliff became highly interested in the geology merit badge on his way to becoming an Eagle Scout. This interest sparked a rock hound and gem cutting hobby that was carried out during his thirty-two years of naval service.

In 1981, Jim retired from a very successful career in the naval service where he had achieved national prominence as a naval engineer. In recognition of his expertise, he received numerous military awards up to and including the Legion of Merit. He also received the American Society of Naval Engineers President's Award in 1976, 1978, 1979 and 1981, the Frank G. Law Award in 1981 and the Jimmie Hamilton Award in 1982. He is also proud of the four Freedom Foundation, George Washington Honor Medals presented to him in 1976, 1978, 1979, and 1981. He has been listed in "Who's Who in Engineering" since the early 1970's.

Upon retirement from the U.S. Navy, Jim decided to turn his hobby into a business. In 1982, Jim and Ardythe Jolliff founded Gemcraft of Annapolis and in 1984 incorporated this growing proprietorship, in the State of Maryland, as Jolliff Enterprises Inc. Jim has been active full time in the gem and jewelry business ever since. Not one to settle complacently into a new career, Jim decided he had better become qualified in his newly chosen vocation. He earned a Graduate Gemologist Certificate from GIA in 1981, an F.G.A. (with distinction) from the Gemmological Association of Great Britain in 1982 and an F.C.Gm.A. from the Canadian Gemmological Association in 1984.

This early gemological training proved sufficient to develop a reasonable livelihood in performing services as a gemological laboratory, but in Jim's mind this training was insufficient to permit his doing a first rate job in his expanding gem and jewelry appraisal practice. This led to his successfully completing the education process and testing to achieve "Designated Member" status in ISA in 1985 and ISA - CAPP in Antique Jewelry in 1988. He also studied, was tested, and was designated Senior Member in 1987 and Master Gemologist Appraiser in 1989 by the American Society of Appraisers.

Jim has been a staunch supporter of gem and jewelry appraising educational courses over the past several years. He dedicates 5 weeks of every year to his own continuing education. He has also tried to pass such education on to others by teaching several courses in gemology and antique jewelry at the local community college from 1973 to 1990. He also volunteers as an instructor in gemology in the Anne Arundel County "Explore" program; a program for gifted 5th and 6th grade students and recently spent two days as a guest lecturer at the Lizzadro Museum in Elmhurst, IL. He has also taught a one day course in appraisal theory for NAJA in 1987, 1988 and 1989 with co-instructor, Anna Miller. Courses given at the University of Maine by Joseph Sataloff, at New York University by Joyce Jonas, and the NAJA Annual Conference are his favorites for self education. He also attends selected AGA, ISA and ASA Annual Conferences and has taken most of the one day GIA seminars offered at Tucson, during the February Gem Show.

Dr. "J" as he is sometimes called because of his Doctorate in Engineering (DrEngr) has worked hard in providing educational information to others. In his role as National Education Chairman (1985-1990) for the National Association of Jewelry Appraisers, he organized and ran five successful NAJA national Conferences in Tucson, AZ. Prior to that, he served as NAJA's Ethics & Grievance Co-Chairman from 1982-1985.

As he became more and more convinced that the public would more readily accept appraisers as "professional people" only if tested, he became interested in the American Society of Appraiser's program and has served as a member of the International Board of Examiners since 1987, as Vice President and then President of the Maryland Chapter 1987-1990, and was appointed as an instructor in the ASA-MGA program in 1989.

In addition Jim has written numerous articles for the NAJA bi-monthly magazine, "The Appraiser" as well as several book reviews. He also tested the G-I and G-XL-18 Gold Testers for NAJA and is currently testing the G-XL-24 Gold Tester by Tri-Electronics of San Diego, California.

Given all of the above, Jim has several strong opinions on the future of the gem and jewelry appraisal and gemological industry.

First and foremost, he believes there is a need



for the various disciplines within the industry - gemologists, appraisers, wholesalers and retailers - to unite in their efforts to do right by the public. There needs to be a definite set of ground rules established so that each segment of the industry is supportive of the other, rather than giving the appearance that they are constantly in direct conflict with one another; a perception currently prevalent among most of the consumer public.

"Customers have the right to know that the merchandise they buy is well made, technically correct in terms of gold karatage or silver content, properly identified and correct in terms of carat weight of gemstones involved, and what if any treatments to enhance the product have been clearly identified. The establishment of guidelines on these issues, and adherence thereto by the industry, should aid in clearing away some of the confusion surrounding the gem and jewelry product as it progresses from manufacturer to wholesaler to retailer to consumer and appraiser."

Secondly, it is his opinion that if such guidelines are to be achieved there must be greater unity among the discipline groupings which make up the industry; primarily in the acceptance of each other's standards, practices, educational programs, tests, ethics, and procedures. For example, within the appraisal grouping, many organizations are pursuing separate educational programs to address issues raised by the public and the trade press concerning ethics, appraisal practices, identification of synthetic materials, valuation methods, etc. "These new programs are costly, time-consuming, and many times simply test an individual's ability to re-state in a testing environment, information which he has been previously tested on elsewhere. As a member of several appraisal organizations, I find myself wondering if such costly testing programs are designed to improve the profession, put money into the hands of sponsoring organizations whose leadership receives payment for teaching the required courses, or both."

Lack of significant progress toward joint cooperation by the appraiser organizations leads Jim to believe that the biggest impediment to unity is simply the fact that organizations view themselves as competing for the consumer public's - and their membership's - limited dollars. He believes that "if we are truly interested in becoming a profession, we must somehow demotivate our desire for excessive growth and profit and motivate ourselves such

that our actions reflect those of an industry that is worthy of obtaining professional stature. Leaders of the various organizations that make up our industry must put aside ego, power, position, and profit wherein such actions are deleterious to the reputation of the industry as a whole".

Thirdly, it is his opinion that the educational opportunities available to industry members have grown dramatically over the past five years - "so much so that a strong, unhealthy competition has arisen among many of the smaller educational groups. With only limited numbers of industry personnel seeking advanced information, many programs have already educated the initial 20% of their active membership and are now finding it difficult to continue their enrollment at levels where the cost/expenditure ratio remains positive. On the other hand, GIA and GAGB have been able to obtain a positive ratio - so much so that there is now a proliferation of young graduate gemologists coming into the industry. Care must be taken that educational vehicles are designed to produce quality gemologists and appraisers. To be successful, the appraiser needs strong understanding of valuation science as it applies to precious metals, gemstones, manufactured wholesale goods, and retail goods. The appraiser must be taught the specifics as well as generalities of the marketplace".

Jim remains a strong advocate for state licensing of personal property appraisers similar to that required for doctors, lawyers, and professional engineers; such licensing to be based on a fixed level of both gemological and valuation science education and a minimum of five years of practical experience. "If we want to be professionals we must be willing to subject ourselves to the rigors placed on groups who are currently judged by the public to be 'professional'. Such licensing should virtually eliminate the unqualified from the profession".

Finally, he asserts that there is a need for everyone in the industry to examine their own ethics. "Everyone is willing to admit there is an ethics problem. We can legislate ethics somewhat through the licensing concept, but there is no educational program, testing program, or certification program in the world that will cause a person bent upon profit through deception and misrepresentation to cease and desist. Thus, if we are to gain professional status in the future, all levels of the industry must strengthen their position with the consumer by truly practicing the standards established in their associations' codes of ethics



and where such codes do not exist, they must be established."

Dr. "J" strongly holds forth that the above issues must be addressed by our industry if we are to be recognized as professionals - a goal to which most members of our industry aspire. He believes that "the initial steps toward making such recognition a reality have been under way for several years in many segments of the industry. Some of these efforts are progressing slowly but surely, while others have been derailed or lost their direction for a variety of reasons. We need a concerted effort to realign our goals under strong, discipline-oriented, umbrella organizations in order to gain a united focus".

Jim was a member of the Accredited Gemologists Association 1982 to 1984 and renewed membership in 1987 to present.



## FOCUS ON GERHARD BECKER

Mr. Becker spoke at AGA's Tucson conference on the carvings of Idar Oberstein.

Nestled in a valley that is skirted by deep green forest and is cut by the river Nahe, the German twin towns of Idar-Oberstein are as quaint and picturesque as befits the world's lapidary capital.

Here the art of gem cutting has flourished for centuries, making this modest community of 35,000 people a true landmark on every gemologist's map.

Occupying an office on Mainzer Strasse in the center of this postcard-perfect town is Gerhard Becker, one of the world's pre-eminent gem carvers whose name has become synonymous with the superbly crafted images of birds and other animals that are created under his supervision. Mr. Becker, who is actually involved in all aspects of gem cutting, is well known all over the world for his lectures and presentations on his hometown's famous craft.

"It was my good fortune," he tells us, "to be born into a family that has been professionally involved in gem cutting - in a direct line - since 1599." Although being a member of a veritable dynasty of gem cutters may have easily prestaged Gerhard's life calling, he points out that his early days in the field were not easy, nor were they preordained. "I went to school in Idar-Oberstein from 1947 to 1963," he says, "and the end of my education marked the period right after World War II, when the economy was full of uncertainties." Although the gem business at the end of the war was not thriving, it was slowly beginning to revive itself, and Becker became confident that following his family's tradition and becoming a gem cutter was the right path to take. "My first exposure to the science of gemology was when my father worked with a doctor's microscope to examine synthetic gemstones, mostly rubies and sapphires produced by the Verneuil method. He always tried to get me more interested in this field, too. He bought one of the first available Rayner refractometers after the war, and it made a substantial improvement in our little laboratory."

Once Gerhard had decided that all his childhood exposure to gemology and jewelry arts was adding up to something, he proceeded to get as well-rounded an education as possible. "As an apprentice I worked for three years in the family company, which was founded by my grandfather, Friedrich August Becker, and bears his name," he relates. During his apprenticeship, Becker was taught by a 40-year veteran of the company, who in turn had been trained by Becker's grandfather. He continues: "After passing the necessary tests at the end of my apprenticeship, I worked for another year as a gem cutter in my family's company in order to gain more practical knowledge before I enrolled in a two-year program at a business-administration school." Following his business training, Becker completed yet another apprenticeship in administration. At that time, having learned two professions, Becker felt he was duly prepared to assume a more active role in the family business. He joined his father, F.A. Becker, in overseeing the company's gem-cutting activities as well as its dealings in gems and gem materials. Becker recalls: "On a small scale my father had already started in his younger days to deal in mineral specimens as a result of his deeper interest in gemology. He was widely known in the industry as a cutter of rare stones as well as a specialist in cutting difficult materials." Becker worked with his father until the latter's death in 1958, and during that time he developed expertise in both running the business and cutting difficult stones. "It was quite a challenge working as a 'jam-peg' faceter with such unusual materials as apatite, euclase, flourite, and sphalerite, among countless others", he comments. In 1961 Becker became sole owner of the company, and as he puts it, "I was faced with an important decision: where to take the company in the future, considering I had to run a business within a fairly small community where several hundred companies were cutting gems, dealing in gemstones, and producing jewelry."

Becker's decision was an adventurous one: to travel to other parts of the world to learn more about the sources of rough gem materials he had been working with throughout his career, and to promote the crafts of his native Idar-Oberstein. He has been very successful in his endeavors and has made quite a name for himself not only in his own community, but throughout the world.

# TREASURERS REPORT

ACCREDITED GEMOLOGIST ASSOCIATION, INC.  
A MEMBERSHIP ORGANIZATION  
STATEMENTS OF REVENUES AND EXPENSES  
FOR THE YEAR ENDING DECEMBER 31, 1989  
BY - DANA RICHARDSON

## REVENUES

Conference fees	\$ 13,360.64
Membership dues	13,296.00
Sale of conference tapes	395.00
Gem lab accreditation	150.00
Miscellaneous	<u>39.72</u>
Total Revenues	<u>27,241.36</u>

## EXPENSES

Conference expenses	13,680.25
Publications	7,997.89
Officer expense	3,612.09
Office expense	1,076.30
Computer development project	394.27
Awards	<u>191.25</u>
Total Expenses	26,952.05
EXCESS OF REVENUES OVER EXPENSES	\$ <u>289.31</u>



# BOARD OF DIRECTORS FOR '90

PRESIDENT - Cortney Balzan  
PAST PRESIDENT - Robert Rosenblatt  
2ND VICE PRESIDENT - Young McQueen

1ST VICE PRESIDENT - Donald Palmieri  
SECRETARY - Craig Lynch  
TREASURER - Dana Richardson

## REGIONAL GOVERNORS

REGION I - Thom Underwood  
REGION II - Kevin Wood

REGION III - James Joliff  
REGION IV - Tom Seguin

## COMMITTEE CHAIRS

ACCREDITED LABORATORY-	Ann Hawken
✓ ADMISSIONS AND MEMBERSHIP -	Tom Gorman
AGANET -	Robert Rosenblatt
CONSTITUTION, BY LAWS -	Robert Rosenblatt
-EDUCATION-	Donald Palmieri
-ETHICS, GRIEVANCES	Jeff Hurwitz, David Atlas
HISTORIAN/LIBRARIAN-	Cortney Balzan
~PUBLIC RELATIONS-	T. William Benedict
✓ PUBLICATIONS -	Dana Richardson
✓ SOFTWARE REVIEW COMMITTEE -	Thom Underwood, Robert Rosenblatt
✓ STANDARDS AND DISCLOSURE-	Cap Beesley
✓ SUPPLIER MEMBER/MEMBERSHIP BENEFITS -	Craig Lynch
✓ TUCSON '90 -	B.J. Caldwell, Dana Richardson, Thom Underwood, Cortney Balzan

For more information on Accredited Gemologists Association, contact:  
Cortney Balzan, President  
International Headquarters 415-454-8556

AGANET 24 hr, BBS Access Number 801-466-9539