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ACCREDITED GEMOLOGISTS ASSOCIATION 

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*TO DEVELOP AND PROMOTE PROFESSIONAL STANDARDS
IN THE PRACTICE OF GEMOLOGY*

Notes From the 1981 AGS Conclave
Harold A. Oates, GG,FGA
Glen Ellyn, Illinois

Flux synthetic ruby, such as Chatham and Kashan, usually have flux inclusions - some fine, some coarse - that resemble interconnecting icicles. Some of the near-flawless Kashan rubies, when viewed under 60x, have fine, streaky drops arranged in a "falling rain" pattern. The optic axis on many of these flux-fusion rubies and sapphires is perpendicular to the table. Hexagonal and trigonal platinum crystals are proof of synthetic origin. Some Kashans have an orangish, garnet color.

Fluorescence is observed with short-wave ultraviolet light and with comparison stones. The fluorescence of Kashan rubies falls between Burmese and flame-fusion synthetic rubies. Kashan rubies usually have a bluish overtone under short-wave ultraviolet.

Heat Treating of Sapphires: Most blue sapphires are heat treated today. There are some very fine "Gueda" blue sapphires, many in large sizes, that were once worthless, milky white stones until supposedly heat-treated to a fine blue. This treatment usually cannot be detected, but the absence of the 4500 Angstrom (iron) line is an indication of treatment, as is the presence of lily pad-type inclusions.

Diffusion Treatment is a relatively new and very serious problem in identification. Some light blue to colorless Ceylon-type faceted stones are being coated with a blue material which is subsequently baked onto the surface, leaving a pitted "ceramic" coating. The stones are then sent back to the cutter for repolishing. These stones cannot be detected by magnification alone. However, if they are placed in an immersion cell containing methylene iodide, some of the recut facets are seen to be lighter or darker than other facets, due to the reduction of thickness of the surface coating during repolishing. This color tone difference can be seen without magnification. In addition, if the girdle has been repolished, there is little or no color left, and viewing the stone through the girdle will give evidence of this. Yellow sapphires with weak fluorescence are probably treated by this process, as are some Padparadscha. Immersion is the only way to detect such treatment. Dark, reddish topaz which shows a chromium absorption line is probably not treated.

Notes From the GIA Laboratory Session:

Rutile needles in corundum which intersect at 60° form many equilateral triangles, while almandine and rhodolite garnets, whose needles intersect at 70° and 110°, form isosceles triangles. If one observes the 5050 Angstrom line in garnets, it is diagnostic.

The New York laboratory has seen laser drill holes in CZ which go nowhere; an indication that there was no included "something". The girdles of diamonds vary in thickness, unlike evenly-thick girdles on substitutes. Only diamonds have

bearded girdles. When color grading mounted diamonds, it is helpful to hold the master stone in tweezers with the table nearly touching the table of the mounted diamond to be graded. Some graders gold plate the tweezers in which the master stone is held if the mounted stone is set in yellow gold prongs or bezel. It is suggested that .04 mm be added to the diameter of a bezel-set diamond when calculating the weight by formula.

In grading marquis diamonds, it is best to do so in four directions through the girdle, choosing the darkest color.

Dr. Vincent Manson gave a short talk on the Color-Master. The light that shines upon the stone to be graded, will be subdued to reduce reflections. He said that whatever readings derived by the grader can be put into a formula, resulting in a standard reading that will conform to the standard scientific nomenclature. Color-Master owners will be supplied with these things when they become available.

One Other Note: There is a new plastic opal cabochon which is very convincing, and will fool a lot of people, especially when mounted. If the eye of a needle is gently pressed and lightly pulled over the surface of the opal, it will leave a crease which disappears in a matter of moments.

Brazilian Gemstone Market Trends
T. F. Zook, FGA
Alexandria, Virginia

A fascinating account of Brazilian Gemstone price trends was heard July 20, 1981, by members attending the organizing meeting for the Washington Metropolitan Chapter of the A.G.A. The gem dealer speaker represents a supply line in which rough and cut gemstones are offered in Brazil to his parents, and then to him as cut stones, to market here in the United States. Since most Brazilian gem materials go through a half-dozen hands before they reach the U.S. market, this information so near the source of supply is extremely valuable to all members of A.G.A.

Important developments in Brazil have affected and continue to affect gemstone prices:

1. Brazil experienced 100% inflation last year while undergoing a 10% growth figure.
2. The gold strike in the north of Brazil has lured the independent gem miners out of the Minas Gerais gem fields, thus reducing the output from this foremost gem producing state.
3. A growing gem market exists in Brazil where 50% of the population is under 25 years old.

The lack of gemstone mining in the state of Minas Gerais will particularly affect the supply of beryls and a price rise can be expected in the next six months.

Specific Gemstones:

Brazilianite: There is no supply available.

Beryls: Aquamarines are already priced in Brazil at 20% more than prices in New York City. Top quality aquamarine in 12-20 carat sizes is bringing \$500 - \$600/ carat in New York, while in Brazil, the better grade of aquamarine is bringing this same price. (12 carats is considered the ideal size for a ring; 20 carats, an ideal size for a pendant).

Emeralds (in limited supply) are coming out of Brazil from the region south of Belo Horizonte (State of Minas Gerais). Brazilian stones are more opaque in color and are sleepy stones when compared with Colombian emeralds. The finest Brazilian emeralds are 60% clean. A large, fine-cut emerald of 20-25 carats brings \$3,000 - \$5,000 per carat in Brazil. Most of the emerald rough is heavily included. The very finest Brazilian emeralds are not sold in Brazil, but are marketed through Bogota, Colombia.

Golden Beryls of 5 carats or more sold on location in Brazil now bring as much as aquamarines. These same quality sold for \$20.00 per carat five years ago. One, two and three carat sizes are the most popular in the U.S. market. A great deal of yellow beryl is being sold as golden beryl.

Morganite is now being pushed as an investment stone and the rush to buy has been fantastic. Six months ago, there was none for sale. Now, the supply has been pulled back two to three weeks. A 12-15 carat, faceted, in a good pink color, wholesales in Brazil for \$39.00 per carat and will be sold retail at triple keystone.

Andalusite: Is currently not available in the market, except for some old production at \$80.00 per carat in 10-12 carat sizes. In parcels where the stones run in mixed lots from 1/2 to 5 carat sizes, andalusite is available at \$12.00 per carat. The green shade is preferred, and there is a big market for it. Andalusite is a sleeper stone on the Brazilian market.

Diamonds: Diamonds are the biggest sleeper in Brazil. Most of them are cut by the government in one central place. However, in Bahia there are two places which cut diamonds, although the cutting is not very well done, and these diamonds are 20% cheaper than the prices in the international market. Brazil does produce some very fine quality stones of D color in one and one-plus carat sizes. The Brazilian demand for diamonds will take these out of the international market place.

Euclase: Still a sleeper stone in Brazil, in a blue comparable to aquamarine, it will bring twice as much per carat as aquamarine. Recently, a 6 carat Euclase crystal was offered at \$1,000.00 per carat.

Garnet: Spessartite garnet, which comes from localities south of Minas Gerais and south of Sao Paulo, is not being produced at this time.

Opals: Opals are being found in gold mining areas. No price information was given.

Quartz:

Amethyst of fine quality can be bought wholesale in Brazil in parcels of 5,000 carats and up for \$3.50 - \$7.00 per carat. A 25 carat stone of fine quality and Siberian color can be bought from exporters for \$15.00 - \$25.00 per carat, while medium-purple stones can be purchased at \$12.00 per carat. A deeper purple-blue color which shows yellow on the sides, brings \$10.00 per carat. Amethysts in the middle to better quality are still sleeper stones in Brazil.

Citrine is also a slow mover in Brazil. Rio Grande do Sul amethyst which has been heat treated to produce a color very similar to that of Imperial Topaz brings \$3.50-\$7.00 per carat wholesale. (This heat treated amethyst is marketed as citrine). Bahia citrine in clean, beautifully cut, light golden yellow can be purchased in the 10-15 carat range for \$2.50 per carat at a wholesale price from the dealer.

Scapolite: Scapolite now sells for \$30.00 - \$50.00 per carat in Brazil, for nice, clean stones.

Spodumene: Hiddentie, in a medium green color, brings \$20.00 per carat (in Brazil) while an excellent green commands \$30.00 per carat. Two step-cut Hiddenites were seen at the meeting.

Topaz: German step-cut irradiated blue topaz goes for \$8.00 per carat. Irradiated cobalt blue topaz in 5-10 carat sizes brings \$7.00 - \$8.00 per carat. Recently, a natural blue topaz of 20 carats brought \$1,500.00 per carat in Brazil. Natural blue topaz of a rare color tending toward navy, brings \$50.00 per carat in Brazil.

Precious Topaz, or Imperial Topaz, as it is known in

Brazil, comes from the area around Ouro Preto, and in a 5-10 carat size, brings at least \$300.00 per carat in Brazil.

Tourmalines:

Tourmaline prices are skyrocketing in Brazil. Stones of a good green color with a tinge of blue and of average quality, in a wholesale order of 1,000 carats, cost \$60.00- \$80.00 per carat in Brazil. Tourmalines of a chrome green color, oriented on the C axis, bring (on the average) \$150.00 per carat.

Indicolites, of a good blue color in 5-10 carat sizes are in demand and scarce. A nice blue stone brings \$125.00- \$150.00 per carat in Brazil.

Red-brown tourmalines, which turn red when heat treated, bring \$200-\$250 per carat in 5 carat sizes.

Pink tourmalines wholesale for \$100-\$125 per carat in Brazil.

Rubellites, in 5-20 carat sizes and 90% clean, have been offered at \$200.00 per carat.

Our speaker informed us that the best buys in gemstones in Brazil are made by trading rubies and sapphires for Brazilian stones.

The information given is very important to all gemologists who are doing appraisals or who are reappraising gemstones. It is also important as a tool for advancing gemologists' careers when they can be knowledgeable about the gemstone market price shifts.

It is to be hoped that other members of the AGA will provide information on market trends in gemstones from other sources, so that we can all share in the latest information.

The Gemologist - A Professional?
Elaine Baker, GG, FGA
La Jolla, California

The Accredited Gemologists Association consists of a select group of people who should be classified as professionals by virtue of education accomplished. But, does education alone make a professional? A profession implies certain aspects. Prestige most certainly is a part of professionalism and the letters: GG, FGA, FGAA, etc., ostentatiously displayed attest to the significance placed upon the educational requirements of the gemological field. But professionalism also implies

some responsibility and some restraints in the pursuit of business. It is time for those who would profess to be gemologists to take the profession seriously and truly become professionals in all that the term implies.

A noted author of gemological books and articles has a very sly way of expressing an opinion about professional competence. If the individual being mentioned is highly regarded, the English spelling, "gemmaologist", is used. Otherwise, the American spelling, "gemologist", is used, indicating that there is perhaps more to being a gemologist or gemmaologist than a few letters following a surname.

A profession is defined as "an occupation requiring an education". The A.G.A. member has education implying a degree of expertise. That expertise is essentially in identification procedures relying on an understanding of some of the optical, chemical, and physical properties of gemstones. Such knowledge has, in the past, been sufficient to pursue careers in jewelry stores, research, and teaching. Today, there is still a place for the gemologist in the jewelry store, the laboratory, and the classroom. There is also a growing demand for a professional who is really an expert in the field of gemology; an expert who understands all phases of the gem world - from the atomic mysteries locked deep within the gemstone to the nebulous world of evaluation and appraisals.

Members of the gem and jewelry trades are coming, in ever greater degree, to rely on the gemologist to ascertain identities and qualities and assist in evaluations. Other professionals, such as financial planners, insurance people, bankers, and tax planners are looking toward the gemologist for advice and expertise in a world of specialization and increasing complexity. Individuals have need of the services of the gemologist for traditional purposes, such as insurance and estate appraisals, as well as identification and grading, but the most critical need for a professional gemologist arises as a result of changing directions in the gemstone market of today. Individuals are encountering gemstones from many different sources today: the telephone, the mail box, bank giveaways, barter offers.

Most laymen in this country today have very little knowledge of gemstones, other than that "diamonds are a girl's best friend". When confronted by attractive and alluring advertisements and enticing offers of gemstones, there is usually total ignorance about where to turn for consultation. The professional gemologist is the one who must be able to provide this service.

Today, gemstones are being acquired by more and more people who have absolutely no knowledge of them, due to the marketing methods. These people may be buying or selling gems, or otherwise engaged in activities involving gemstones. There is nothing wrong with this situation, but it is bringing about an increased reliance on paper or "pedigrees" of gemstones. The paper, commonly referred to as a "certificate" accompanying the gemstone, may simply be a grading report, but it may also include an appraisal or evaluation. It is for

the gemologist to both provide and interpret the paperwork for the gemstone.

The requirements of serving the public as a gemologist in this new age of marketing gemstones requires more than the attainment of diplomas from the Gemological Institute of America, the Gemmological Association of Great Britain, or other schools. The curricula available at these schools includes the skills which are but a first step toward fulfilling the requirements and obligations of the professional gemologist of today.

In order to provide the services required by the industry as well as the public, today's gemologist must be well-versed in gemological skills, maintain those skills, and keep abreast of new developments. Additionally, it is imperative to have a full understanding of pricing structures throughout the many distribution channels for gemstones, in order to realistically evaluate them.

Finally, it is necessary for the gemologist to understand the responsibility of providing professional gemological services. These services result from knowledge, skills, and experience in a very specialized area. The client, whether from the gem industry or the buying public, relies on the gemologist for knowledge that is lacking in the client. This is a grave responsibility when thousands of dollars may be involved in the decisions made by the gemologist. That responsibility becomes more awesome when one realizes that any paper work done for a gemstone could continue to accompany that gem through an infinite number of changes in ownership. The responsibility of the gemologist is as great to the thirtieth person to see that paper, as it is to the first.

The Accredited Gemologists Association is the only organization solely for gemologists. Such an organization is needed to serve the gemologist as a communication channel and a forum for new discoveries and ideas. It should also serve to establish guidelines for the gemologist who would claim to be professional, and guidelines that will give the public confidence when seeking a gemologist. The independent gemologist is in need of a strong, well-structured organization. That organization must be supported by payment of dues, of course, but the real support is that which comes from member participation. It is from that participation that the professional gemologist will emerge, and the organization will become meaningful to the gemologist, the trade, and the public.

A NOTE FROM MARVIN MILLER: Everything is all set for our regular membership meeting in conjunction with the International Gem "Collectors and Investors" show at the Sheraton Inn - Washington, NW, 8727 Colesville Road, Silver Spring, Maryland on the 3rd of October, 1981, at 7:30 P.M.

A Synopsis of Personal Views of the 1981

June International Investment Gemstone Conference

Joseph Tenhagen, F.G.A., G.G.
Miami, Florida

This past June Conference in Los Angeles, sponsored each year by PreciouStones Newsletter, is an event I never miss and I urge each of you to attend next June. There were a few A.G.A. members present and a number have since joined our Association. I wish to thank Mr. Bernard Cirlin, editor of PreciouStones Newsletter, for allowing me to distribute applications and increase awareness of the Accredited Gemologists Association.

During this extremely intensive, highly educational three day conference, I have come to the conclusion - shared by others - that one future thrust of our industry will be toward investment portfolios, pension funds, and, most especially, limited partnerships formed for the express purpose of gemstone investments.

These financial methods of gem ownership will never take the place of private ownership. The beauty of gems has, historically, lured people to desire them for themselves, in privacy. It will, however, allow people who cannot afford the more expensive gems, or who wish to make minimum investments, an entrance into the realm of group ownership.

The speakers at the Conference are always excellent; drawn from every conceivable area of the business world that touches on gemstones. Due to limited space, the following are just a few of the many who remain in my mind (refreshed by notes taken or tapes purchased).

Peter G. Read, F.G.A., noted author of A Beginner's Guide to Gemmology, and Gemmological Instruments, and presently affiliated with the marketing firm of Gems International, spoke on an instrumental color grading system for Sri Lankan blue sapphires.

The emergence of National and International grading systems was for purposes of valuation, and today, despite the sophistication of grading systems, the majority (of graders) are still using comparison grading techniques based on the use of Master stones for color assessment. The subjectivity of this grading leads to different results when the same stone is appraised by more than one grading laboratory. Even when identical standards are applied, physiological and interpretive differences between personnel determine different appraisals.

Repeatability is a key goal in engineering, and the same criteria should be sought in a grading laboratory.

Now that colored stones have entered the investment market, certification needs have begun to retrace the earlier path taken by diamonds. The range of hues has made color grading problematical. The visual impression of color is the result of absorp-

tion of certain wave lengths of the visible spectrum. As these absorption spectra intensify in complexity, it becomes more difficult to assess color with the use of the spectrum. The relatively simple spectroscope cannot measure the amount of light and this missing quantitative is the basis of instrumental color grading.

The measurement of colored stones is much more difficult than measuring yellow tints of diamonds because one must measure the stone's dominant hue, amount of secondary color present, depth (saturation) of color, and the brightness of the color.

For the past two years, Mr. Read and a colleague have been working on developing a color measuring technique for grading Sri Lankan blue sapphires of investment quality. The segregative nature of color grading one variety with one color has eliminated the "hassle of looking across the complete spectrum of colored stones" and one is presented with a relatively simple problem. Furthermore, previous screening of clarity and quality leaves only the problems of color saturation and purity, "perhaps a bit unfair in terms of basic technology", but if successful, it will negate the subjective areas seen in comparison grading.

The Zeiss PMQ-3 spectrophotometer is being utilized and is a useful tool for the duplication of color samples of Master stones. The PMQ-3 has a light source, monochromator to select exact wave length, an integrating sphere, and a mechanism for precise, accurate, repeatable loading of stones.

The CIE system of color assessment has been chosen "because of its long history of measuring color in all sorts of articles". It tends to fail in the area of high-lustre material, and spectral modifications must be made for the spectral reflections. The tristimulus values (X,Y,Z) are derived and fed into a computer, and the color coordinates are precisely plotted on the color chart.

He is gradually building a history of limits for the computer in terms of color purity and developing a color angle for computer read-out, allowing plotting into color purity zones. Finally, he hopes to come up with a system answering two of the dimensions of color - purity and saturation. The Y Factor, representing brightness, is equated at 100%.

(There is confirmation that the Verneuil loses its iron oxide content and the iron bands are completely absent in this synthetic. Use of a simple, hand-held spectrometer could not detect this, and, in extreme cases, the PMQ-3 could verify).

William Goldberg, President of the New York Diamond Dealers Club, apprised us of their new 35-story building nearing completion for the 1900 members of the Club, and the formation of a West Coast Bourse, to be accepted into the World Bourse by early 1982. He feels the industry today is two-tiered: 1) Jewelry, and 2) Investment. He is not personally sure of the latter and would like to see the former become strong and healthy. He was adamant in his opinion of expelling the "hit-and-run" merchant, and feels we are reaching the levelling-

off point in the reduction of rough from DeBeers.

Robert McNamara, Senior Vice President of a well-known Wall Street firm, noted that his was the first firm to enter the area of diamond investment, one year prior to the others. The decision in 1979 to do so, was shaped by their philosophy that the American investing public had moved to hard asset investments. Gold, silver, and platinum were considered, but the "track record" of diamonds was enviable and could be an interesting investment, not as subject to wild fluctuations as metals.

The Firm put up \$12 million to begin a unit investment trust; experienced obstacles of the SEC and IRS; purchased \$9 million in diamonds and \$1 million in government bonds (to generate funds); hired gemologists and advisors. Bringing this before the Public, and the pricing, became a "horrendous" problem. Using three independent evaluators, they took the average of the three to determine prices (irrespective of cost), attempting to get as fair a market value as possible.

Colored stones were not considered as the GIA grading system on diamonds was more complete. He cautioned those in diamond trusts to NOT repeat real estate trust mistakes.

Martin Rosenzweig, Ph.D., Chariman and Chief Executive Officer of an investment and investment counselling service, spoke on Limited Partnerships. The definition of a limited partnership is: a collection of individuals who have joined together to participate in a particular venture and the interests are securities. There are two classes of people who participate: (1) the limited partner, who supplies the capital, and (2) the general partners who are responsible for the operation and management and have a fiduciary responsibility to the limited partner. The limited partner enjoys limited liability, while the general partner shoulders unlimited liability and is totally responsible, economically, for the venture.

(The move by securities companies toward gemstone investment was actuated by recent, dramatic shifts in terms of interest in hard assets, and the greater role of diamonds and colored stones in the investment market place.)

As a security, a limited partnership must be registered with the Securities and Exchange Commission. There are few exemptions from registration. If a private offering is set up and subscribed to by 35 or fewer people, one can register with a state securities commission, as was done in this case.

- Advantages of the Limited Partnership include:
1. Providing a partner with a Prospectus which contains full disclosure as to all aspects, including potential risk factors.
 2. The body of security laws, fully governed, provides the investor with a degree of comfort and protection.
 3. The relatively low minimum investment required and the advantage created individually by pooled funds with mass purchasing power. (Today, the average investment amount is approxi-

- mately \$9,000.00 - not a very sizeable sum when purchasing diamonds. The minimum investment in his program is \$1,500.)
4. The ability to diversify with a small sum of money.
 5. The utilization of professional management. (The advantage of having knowledgeable people select and negotiate for gems in the market place - a difficult area for the layman).
 6. A relatively low commission structure and the structuring of the investment with an incentive fee.
 7. Lack of concern about safe-keeping and insurance on gemstones.
 8. Requirements of annual appraisals of gems.

Disadvantages of the Limited Partnerships:

1. Inability of the "owner" to enjoy the gems.
2. Loss of the portability factor through loss of personal possession.
3. The limited partner cannot sell gems at will. (The partnership can be sold, but at these early stages of development, there is a question as to which is the most valuable - the partnership - not well-known yet - or the gem.)

The limited partnership is a wave of the future, but will not replace the single stone purchase. There will always be those who demand the personal possession of gemstones.

Barry F. Shore, G.G., Chief Financial Officer of a gem marketing corporation, reiterated the elimination of the term, "semi-precious", substituting "noble" for precious, and using that term to describe once-semi-precious stones.

Joel E. Arem, Ph.D., F.G.A., noted author and past President of the Accredited Gemologist Association, spoke first as part of a panel, and feels that we should eliminate the terms "semi-precious" and "wholesale-retail". An appraisal is an opinion and one should not expect duplicate appraisals on the same stone.

Later, speaking alone on the Geochemical Basis of Gemstone Rarity, he noted that rarity is the basis for long-term pricing. Rarity, by definition is : seldom occurring or found; marked by unusual qualities, merit or appeal, and is equated to actual abundance. Scarcity, by definition, is: deficiency in quantity or number compared with demand.

He put forward an original, unpublished theory on the rarity of emeralds: iron chromate (chromium oxide), trivalent state +3, forms deep within the Earth and is highly insoluble. Once fixed within ultrabasic rocks (at 2,000 parts per million) it will not decompose and will remain forever fixed.

Beryllium, found in granites or granitic pegmatites, is used in the formation of beryl. The chromium content in granitic pegmatites being 2 parts per million, the amount is negligible and formation of emeralds will not occur.

In order for emeralds to form, the elements beryllium and chromium must be present together.

In all the emerald localities of the world, emeralds are found in metamorphic rocks with intrusive activity from igneous

rocks in the immediate vicinity. The final geochemical formation of an emerald is nothing short of miraculous: mud, precipitated from sea water and containing chromium in the concentrations of 500 parts per million, is slowly compressed into shales and then metamorphosed into schists. Late stage igneous activity brings beryllium into the metamorphic rocks and an emerald begins to form. The geochemical act of bringing beryllium and chromium together is almost a mistake of nature and the chances of its occurrence are rare, indeed.

Presenting us with an excellent slide production, he noted the following gemstones (a partial list):

Peridot: There are Mexican lava beds that are solid peridot, extending 50-100 feet in depth, with the largest recoverable sizes being 1-3 carats. "The world will never run out of peridot - ever." But, an 85 carat stone from Burma would be a museum piece.

Sapphire: A 5 carat clean stone from Yogo Gulch is a rarity, so a premium is placed on the price, as opposed to a 5 carat Australian or Ceylonese, which is more plentiful.

Beryl: The red colored beryl (from manganese) indigenous to Montana, is extremely rare.

Topaz: The darker shades are rarer, with pink being the rarest of all.

Wulfenite: From Montana, it cuts beautiful gems and is also rare.

Tourmalines: A "wastebasket" mineral. Manganese, causing the pink color of rubellites, "elbows its way in" to substitute for aluminum and causes strain in the crystal, resulting in the tendency of rubellites to be warped. Clean stones are rare.

Tanzanites: The whole world's supply is limited to an area less than 5 acres!

Sarabeth Koethe, G.G., heads the United States Gemological Services, Incorporated laboratory. The 1978 colored stone certificate program was an attempt toward a subjective statement. She strongly feels that many magnificent stones are "deplorably" cut. Further, the Trade should give out (share) information on sources, new treatments discovered, and express a renewed tolerance on results obtained from laboratories.

Guy Margel, President of European Gem Laboratories, advocated the SPP (scientific printing process) directly onto a diamond's surface, simplifying the credentials of a stone; the use of the laser for gemstone measurement; computerized read-outs; computerized spectrophotometry measuring color in sections of colored stones and diamonds. He announced two new EGL labs in Paris and Johannesburg with standardized grading to compare with any EGL lab worldwide. All of their data and discoveries will be pub-

lished in scientific publications, not trade journals, when all research is complete.

Robert Pearlman, President, I.G.I., New York, gave a talk on the 17 C's:

1. Certification (easy on manufacturers, hard on salesmen)
2. Confidence
3. Consumerism (the consumer desperately needs the help of experts)
4. Commitment
5. Consistency
6. Competence
7. Concensus report
8. Control (improved)
9. Creativity (new equipment and techniques)
10. Competition (good)
11. Comparable certificates
12. Co-certification
13. Convenience (of more labs)
14. Cost (reasonable)
15. Computers (reduce cost)
16. Cooperation (needed between labs)
17. Closing statements

Roy Huddleston, Managing Director, DGL, London, announced the discovery of diamonds in the Lake Argyle area of SW Australia which will, in his opinion, make Australia one of the two or three largest producers of diamonds in 5 years. The gem content of this area is estimated at 15%, but another area (Ellendale), which has been rather quiet lately, has a much higher gem content, in his estimation.

Speaking on the rising tide of Russian diamonds, he gave some background history and the unique problems encountered here. Noting the presence of over 400 kimberlite pipes in Russia, the mining techniques employed in extracting Siberian diamonds are nothing short of ingenious: in the Winter, Permafrost penetrates to 1,000 feet, necessitating certain mining methods. A hole is dug and filled with water that is heated; crews build a huge barge over the hole and pumps suck up water, mud, and diamonds. The process is then repeated, with another hole dug in front of the barge, which slowly and inexorably plods forward.

Russian diamonds have a much sharper edge to the crystal, as the Permafrost holds them in place.

The Mir Pipe will rate in history with the Kimberley Mine. His presentation ended with some truly spectacular slides of diamonds.

Gwen Nobbe-Asher, former Editor of Pensions and Investment Age Magazine, noted that we must educate the consultants to enter the pension plan fund area. One worry is liquidation, but the fund is long term. She feels that inflation will be double-digit through the 80's and the government will mandate that there be private pension plans for everyone.

The GIA - Today

Joseph Tenhagen, F.G.A., G.G.
Miami, Florida

Upon leaving Los Angeles in the afternoon, a colleague and I travelled the few miles to Santa Monica and went directly to the GIA bookstore. We had previously phoned to set up an appointment to tour the facilities and were officially due on the following morning.

The Book Store is an absolute delight and we left with an armful of texts, slides of gekstones, and tee shirts.

Dr. Vincent Manson, Director of Laboratory Research, met us the next morning and gave us a Grand Tour of the highly sophisticated laboratory facilities.

We met Dr. Peter Keller, Director of Education, for the first time and discovered we shared a love of emeralds. He took the time to show us the rest of the school.

After lunching with Drs. Manson and Keller, I gave a talk and slide presentation to the students, on Colombian emeralds and mining methods.

Meeting Mr. Richard Liddicoat again was also a pleasure and he, too, took time to spend a few minutes with me.

Besides being impressed with the new school and facilities, the one thing that remains in our minds is the fact that all three of these men took the time from obviously busy schedules to escort us around the school, discussing new techniques and future instrumentation. We do thank them.

To those of you who have not seen the "new" GIA, it is well worth the trip. Our only regret is missing the museum display of Colombian emeralds and gold artifacts. One has to return to reality (and work) after all.

Gemstone Price List Publications

Current market prices for diamonds and colored stones may be acquired by subscription to the following:

PreciouStones Newsletter (Diamonds only)

P.O. Box 4649
Thousand Oaks, California 91359
Subscription- \$125.00 per year, 12 issues. Canada: add \$24.00 per year for postage and handling. All other foreign countries- add \$36.00 per year.

Gemstone Price Report (Diamonds and Colored Stones)

421 Green Lane
Philadelphia, Pennsylvania 19128
Subscription- \$240.00 per year.

(Price lists, cont.)

Rapaport Diamond Report (Diamonds only)

30 W. 47th Street
New York, New York 10036
Subscription: \$100.00 per year

Gem Market Reporter (Colored Stones only)

P.O. Box 39890
Phoenix, Arizona 85069
Subscription: \$55.00 per year.

We wish to thank Mr. Harry Meadow, G.G., Buffalo, New York for the following suggestion, and welcome members' comments:

To stimulate additional funds for the AGA and further the education of the members, a series of color grades for one gemstone (ex., ruby) could be expertly photographed with the cost per carat as of a certain date, for each color grade. Prints could be sold at a nominal charge to AGA members. We would very much like to have some member feed-back on this idea.

Name, Credential Corrections:

Philip S. Thompson, Gem.
Springfield, Maine

William T. Benedict, G.G., should be corrected to:
T. William Benedict, G.G.
New Canaan, Connecticut

Correct credentials:
Robert Townley Nichols, G.G., F.G.A.
New Mexico

Correct credentials:
Harold A. Oates, G.G., F.G.A.
Glen Ellyn, Illinois

Address changes, corrections:

Marion D. Levy, F.G.A.
3200 Lenox Road, NE
Apt. C-302
Atlanta, Georgia 30324

Address changes, corrections:

Joseph O. Gill, F.G.A.,G.G.
760 Market Street, Suite 767
San Francisco, California 94102

Michael B. McGuire, Gem.
105 Navajo Road
Las Cruces, New Mexico 88001

Mr. Robert Nichols, G.G.,F.G.A., of Albuquerque, New Mexico, wrote in, suggesting a column for opportunities and openings for gemologists - domestic and overseas. If you are in need of a gemologist, contact us and we will pass the word.

From the Washington Local...
Marvin D. Miller, G.G.,P.G.
Fairfax, Virginia

The Washington Area Regional Chapter of the Accredited Gemologists Association held a constituting meeting on July 20, 1981. At that time, Tony Bonanno, F.G.A., was unanimously elected Chairman with Cathy Cleiman, F.G.A., being elected Secretary. The following members were present and voting: Tony Bonanno, F.G.A., Cathy Cleiman, F.G.A., Bob Ekleberry, Gem., Dale Farringer, G.G., Sonja Schwartzman, F.G.A., Tom Terpilak, G.G., and Theresa Zook, F.G.A. Following the brief business meeting, Mr. Ricardo Cunha, Brazilian gem dealer, addressed the group on the latest trends in gemstone prices and availability in Brazil.

The Chapter will hold regular meetings on the first Monday of each month, i.e., January, April, July, and October at 8600 Fenton Street, Silver Spring, Maryland. (Phone-588-7770). Any members visiting the Washington area at these times are cordially invited to join us.

From the San Diego Chapter...
Thom Underwood, G.G.
San Diego, California

Election of officers was held June 21, 1981, and the following will serve on the Board for the next year:

Luana Veo	President
Jack Lanier	Vice President
Merika Adams	Treasurer
Laurette Moagland	Recording Secretary
Thom Underwood	Corresponding Secretary
Benjamin I. Angeles	Membership Chairman

San Diego Local, cont...

Meeting Place: 8950 Villa La Jolla Drive, Suite 2200
Time: 7:30 P.M.
Date: August 20, 1981
Speaker: Bill Trevithick
Topic: State of the Market in the Fource Areas

Our first executive board meeting of the San Diego Chapter of the AGA was held on Monday, July 29, 1981. The meeting was very productive. The topics discussed were: Non-profit organizational status, membership, speakers, Public Relations, Special Projects, Permanent meeting location, AGA Logo, and dues.

The results of the board meeting will be discussed at our upcoming meeting.

Along with the results a list of diamond pricing sources will be made available, which everyone participated in supplying at our last meeting. As we all know, prices for cut and polished diamonds have dropped over the past year due to soft demand and high interest rates. According to a local dealer, investment-quality goods are not plentiful, as many dealers have put these better quality goods away. Commercial goods are strong now, especially in larger sizes of 2 carats and up. As demand for these commercial goods becomes stronger, the syndicate will not increase the supply. Therefore, prices for all quality goods will be pushed up. Another interesting note, according to this same dealer, there has been a move to cape colored stones due to the increased popularity of colored gems. Diamonds with a deep yellow color, bordering on, but not quite fancy yellow, are in demand. These are the goods once considered taboo.

Dues: \$20.00 annually AGA National
 \$25.00 each six months for AGA San Diego Chapter

AGA Certificates

We are in the process of revamping the old certificates of membership and ask your indulgence if you have not received one (as a new member). When they are ready, we will send the certificates to the new members, and supply them to present members as quickly as we can. The old ones were rather Spartan, to say the least.

New Members

We welcome the following new members approved by the Board of Directors:

Suzanne M. Anderson, G.G.	8950 Villa La Jolla Drive, Suite 2200, La Jolla, Cali- fornia 92037. Interests: Co-owner, Independent Jewelry Appraisers (gemolo- gical laboratory); the AGA and the San Diego Local.
Patricia Ann King, G.G.	562 Monarch Ridge Drive Walnut Creek, California 94596. Interests: gem shows.
Jack A. Lanier, G.G.	8950 Villa La Jolla Drive, Suite 2200, La Jolla, Cali- fornia 92037. Interests: Co-owner, Independent Jewelry Appraisers (gemolo- gical laboratory); Vice Presi- dent, San Diego Local of the AGA.
David M. Levison, G.G.	22 NW 1st Street, Suite 101 Miami, Florida 33128
B. Young McQueen, G.G.	5613 University Boulevard W., Jacksonville, Florida 32216. Interests: Owner, Antares and Company (appraisals and gem identifications); improving accuracy of appraising mounted stones.
Thom Underwood, G.G.	520 E Street, Suite 705, San Diego, California 92101. Interests: colored stones, (esp. tourmalines and garnets); owner of jewelry manufacturing company; Corresponding Secre- tary, San Diego Chapter, AGA

Addendum to the Accredited Gemologists Association By-Laws:

In continuing the expansion of the base and influence of the Accredited Gemologists Association, the Board of Directors has unanimously voted to amend the By-Laws as follows:

ARTICLE III (add Section 1a); a voting, full Member Status may be obtained by any person who has been elected to the Fellowship diploma by the Gemmological Association of Australia (F.G.A.A.)

ARTICLE III (add Section 1b); a voting, full Member Status may be obtained by any person who has successfully completed study with the Columbia School of Gemology (P.G.)

For your information, ARTICLE XI of the AGA By-Laws is quoted herein:

The Executive Committee shall submit to the membership, via the Newsletter, any proposed amendment(s) to the By-Laws. Such proposals shall be incorporated into the By-Laws unless opposed in writing by a minimum of 10% of the members in good standing.

Unless this proposal is opposed by 10% of the membership, in writing, prior to October 1, 1981, it shall be incorporated into the By-Laws.

Our apologies to Grahame Brown, F.G.A., F.G.A.A., Brisbane, Australia, for the omission of the conversion arrow in the chemical formula, (AGA Publication, Volume Six, Number Three). It should have read:

