

AGA Update

 ACCREDITED GEMOLOGISTS ASSOCIATION

NEWSLETTER

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Dear AGA members,

This is just a short newsletter to accompany the formal schedule of the annual AGA TUCSON CONFERENCE to be held the second week in February at the Hotel Park Tucson (sight of last years conference), and a list of short biographies of the speakers for this event.

It's hard to beleive that it has been almost a year since the last conference. We hope that 1986 treated you well, and look forward to things getting even better in 1987!

I won't be able to be at the conference this year as I will be adding another profession sometime around February 15th - that of motherhood! So I need all of you who will be attending the show, the conference or preferrably both, to keep your eyes and ears open to interesting things going on this year which would be of interest to the other members who are not fortunate enough to make it. Please look for new trends in "hot" stones, new fashion stone colors, unusual, large, new stones appearing, etc.

We also need those of you who have some talent for photography to bring your cameras and help to record the events of the conference, the show and any extra-curricular activities involving our members!

The AGA publications committee is also looking for additional reporters for the bi-monthly newsletters and the upcoming Cornerstone magazine. We need reporters for the diamond and colored stone market, as well as the metals market.

I have not been hearing from many of you with entries for the AGA bulletin board - equipment or products to buy/sell etc. If you or your business have a special product or brochure which would be of interest to the other members, we would be glad to give you a plug in the newsletter.

All we have for you in this issue is a few highlights from trade publications, thanks to our devoted reporters. We all have to contribute in order to make this a more useful and frequent newsletter, so please let me hear from you!

Hope you have a wonderful time at the conference and the show! I'll really miss seeing everyone.

Dana

HIGHLIGHTS FROM TRADE PUBLICATIONS

JOURNAL OF GEMMOLOGY
BY PAM ABRAMSON

VOLUME 20 NO. 2 APRIL 1986

**NEW DEVELOPMENTS IN SPECTROSCOPIC METHODS
FOR DETECTING ARTIFICIALLY COLOURED
DIAMONDS**

by G.S. Woods and A.T. Collins
Page 75

The authors discuss the possible plots that result from spectrophotometer readings of fancy colored diamonds that have been cooled with liquid nitrogen. Artificially colored yellow and brown diamonds produce at least one of the absorption lines at 595 nm, 1936 nm or 2024 nm. When all three lines are absent, the diamonds can be called "naturally colored".

**GEM HORNBLENDS FROM BAFFIN ISLAND, NWT,
CANADA**

by Willow Wight, BA, FGA, FCGmA
Page 100

While examining lapis deposits in the north of Quebec province, transparent hornblende was found. This monoclinic silicate is brown in its transparent form and has properties remarkably close to those of tourmaline. This article describes the properties and occurrence of this collector's stone.

**POSSIBILITIES AND LIMITATIONS IN RADIO-
GRAPHIC DETERMINATION OF PEARLS**

by Irmtrud Lorenz and Dr. Karl Schmetzer
Page 114

Although few gemologists have the equipment necessary to positively identify the origin of pearls, knowing the technique is important to our basic gemological knowledge. This article discusses what can be learned by submitting pearls to direct radiography, X-ray diffraction and luminescence under X-ray excitation techniques.

MODERN JEWELER
BY PAM ABRAMSON

JUNE 1986

THE TREATER'S ART: TRIUMPH AND TRAUMA
by David Federman
Page 45

This is an article that presents a perspective on current gemstone treatments. It outlines a little history, takes a cursory look at state-of-the-art techniques, and hints at the future. It also touches on the turmoil that is evolving as our industry faces disclosure of gem treatments to the public.

JULY 1986

WHY I CALL MY RUBY "CULTURED"

by Judith Osmer
Page 6

In this brief "Forum" article, Judith Osmer the creator of flux-grown Ramaura rubies explains her side of the "discussion" going on between her and the FTC. Ms. Osmer is intent on calling her product "cultured" and presents a convincing argument of why she should not be accused of violations of FTC rules.

HANDY PINS

by Jennifer Schaefer Philby
Page 128

A charming short article and four beautiful photographs briefly trace the Handy Pin jewelry in vogue in the late 19th century. Oscar Wilde brought these into vogue in 1882 by his lecture tour on nature and art. For appraisers of antique jewelry, this is a must-read.

CANADIAN GEMMOLOGIST
BY EDSON RYDER

VOLUME 7 NUMBER 3 AUTUMN 1986

TOPAZ-COLOUR AND CHEMISTRY
by Catherine Wheeler, AG

The first part of this article is a general discussion of topaz, its chemical composition, sources of color and attempts at synthesis. This is followed by the differences between hydroxyl-rich and fluorine-rich topaz.

Hydroxyl-rich topaz takes its color from a transition metal while fluorine-rich color is a result of irradiation. The properties of the two

types are slightly different and can be detected with the usual instrumentation. There are differences in specific gravity, refractive index, birefringence, fluorescence and inclusions. The two sets of readings are close; for example the R.I. of hydroxyl type is 1.63-1.64 while the fluorine is 1.61-1.62.

There is a color difference also. The light red or pink topaz would be hydroxyl, colorless and blue fluorine with yellow to brown going either way.

The article concludes with the various treatments of topaz for color enhancement. There is a chart showing types of treatment versus type of topaz and the resulting color expected. The treatment used could be heat, gamma ray irradiation, high energy electron irradiation or atomic pile.

MINERALS FROM MADAGASCAR

by Stephane Salerno, BSc, Phm, FCGmA

The author has listed various minerals viewed and/or tested on a 15 day trip to Madagascar. Nine species are described along with several varieties of these, while considering their quality and availability.

She feels that there is the potential for commercial mining of these minerals which are: Beryl (aquamarine) Corundum, Garnet, Cordierite, Iolite, Labradorite, Quartz, Spinel, Staurolite and Tourmaline.

A.A. RETZIUS

THE MAN BEHIND THE LINES

by J. Devereux, FCGmA, FGA

A brief biography of Anders Adolf Retzius is presented first, outlining his achievements between his birth in Sweden in 1796 until his death there in 1860. His work in the microscopic study of hard tissues, mostly bone and teeth, led to his discovery of the distinctive markings on the elephant ivory. These became known as the "lines of Retzius" and as a positive means of elephant ivory identification.

The author describes the formation of ivory and the fact that it is primarily dentine. Dentine is roughly 70% mineral (mostly calcium phosphate) and 30% organic

matter (collagen). The article concludes with facts on the elephant life style and the restrictions on the importation of their ivory.

BENITOITE

by Willow Wight, BA, FGA, FCGmA

The Canadian Gemmologist has a continuing series on rare and unusual gemstones. This issue covers Benitoite, which is mined only in the Diablo Mountain range, San Benito County, CA. The stone is of course named after this location and is the official State Gemstone of California.

Benitoite is a beautiful blue, rivaling sapphire. It has a hardness of 6-6½, an R.I. of 1.757-1.804 and a birefringence of 0.047. Its dispersion of 0.046 is slightly higher than diamond. Unfortunately, most of the gems faceted are under 1 carat with larger stones being very rare. The Smithsonian Institute has a 7.8 carat gem and the American Museum of Natural History has a 3.57ct stone.

BENITOITE MINING TODAY

by Michael Gray

Present day mining in San Benito County, California, is being carried out by the author. He describes the history of mining there for Benitoite, the geology in the area and how the mining is done. There is no electricity or water wells in the mine vicinity, making for rather primitive methods being used. The nearest water is a small creek that is dry some of the time. At one time both chrome and asbestos were commercially mined nearby. Many other minerals are very close to where the benitoite was found.

The primary source was worked for many years with the tailings gone over from time to time. Now the alluvial deposits down the mountain are going to be explored. Good results are expected from the first samples taken.

The Los Angeles County Museum of Natural History has a fine necklace utilizing Benitoite. It is platinum and yellow gold with 52 round brilliant cut stones, the largest 2.82cts.

NATIONAL JEWELER
BY YOUNG McQUEEN

NOVEMBER 1, 1986

WATCH ISSUE: Many related articles plus
a buyers guide to supplies.

DIFFERENCES HOBBLE APPRAISERS GROUPS' 2ND
ATTEMPT TO UNITE
Page 1

Attempts to pull together appraisers
in groups under an umbrella to present a
common voice to legislators et. al. are
failing. It appears the main stumbling
block is the National Association of
Jewelry Appraisers' (NAJA) role in the
issue. Respectable organizations such
as ASA and AGS want no part of an effort
that includes the NAJA. They feel the
NAJA is trying to gain credibility
through an association with the profes-
sional, non-profit organizations.

(See an earlier NJ article on the NAJA
that was very critical of the for-profit
organization)

NEW JERSEY JEWELER WINS JUDGEMENT AGAINST
IMPORTER
Page 118

The importer involved is Tobie Kronengold
aka Tiliro Jewelry & Goldby Dal, Inc.

LAPIDARY JOURNAL
BY YOUNG McQUEEN

November 1986

GEM TREATMENT: TOPAZ
by Dr. F.H. Pough
Page 16

Little discussion of treatment. It
is, though, a fine summary of "what" comes
from "where". Good addition to reference
data on Topaz.

INCLUSION OF THE MONTH: SECONDARY MATTERS
by Ted Themelis
Page 19

Iron hydroxide deposited in thin
films.

EXOTIC CRYSTAL MINES
by Peter Bancroft

The Cruzeiro Mine in Brazil,
Almaden Mine in Spain, and the Mari-
posa in California are featured as
sources for unusual collector crys-
tals.

GEMS & MINERALS OF THE USSR
by Edmond Root
Page 42

Principle gem areas are detailed
on a map and the materials available
from each listed.

NATIONAL JEWELER
BY YOUNG McQUEEN

NOVEMBER 16, 1986

GIA ALERTS INDUSTRY TO LARGE, GEM-TYPE
SYNTHETIC DIAMONDS

The Sumitomo Company of Japan has
been producing synthetic yellow diamond
crystals of gem quality weighing up to
1.2cts. They are sold in the U.S. in
cut shapes up to 0.40cts for industrial
use.

GIA has one faceted. It was des-
cribed as having an intense yellow color.
So far it is identifiable as man-made.
The industrial prices range from \$60 to
\$145 per piece.

AVOID 'NO PAY' CHARGEBACKS WITH THESE
HELPFUL TIDBITS
Page 2

Must reading especially if charge-
backs are a present or potential prob-
lem. Includes advice such as (1) avoid
using the Hot List and get photo author-
izations on all transactions and (2)
on phone or mail orders get name of is-
suing bank - this doesn't show up on
carbon copy of a charge that may be the
name for a fraudulent user. Phone the
bank to verify name and address before
you ship.