


CIGem News (October 2008 Revised)

The Newsletter of the Canadian Institute of Gemmology (C.I.G.)

Price Changes for Gem Books

Due to the dramatic drop of the Canadian \$ against the US \$ (almost 20% in one month) we had no other choice but to adjust our prices for books. Prices for gemmological equipment remain unchanged until the end of 2008. We have reduced the price for several books to clear our inventory.

Go to [Specials](#) or visit 

In the Aftermath of the Andesine Scandal

As reported in the Trade News JTV (Jewelry Television) has reached a settlement in the Andesine-Labradorite class action law-suit; read [here](#). However, serious concerns remain about Andesine as this material has been sold at the Tucson Gem Trade shows for several years. Gemmologists and consumers are now aware of the treatment as reported earlier in CIGem News and in the [Canadian Mining News](#).

When surfing the internet and searching for gem dealers offering andesine you come across the grotesque situation where one dealer asks between \$ 20 and \$ 200 for a piece of treated andesine ([see here](#)) and another one 10 times as much for a similar piece accompanied by a laboratory certificate; [see dealer](#). Others have removed the stone from their sites and await further details; [see here](#).

I personally believe that JTV got away a little hurt but continues business as usual. However, gemmologists need to be alert.

The issues surrounding tourmaline have so far not been resolved and need further studies. I have talked to several cutters who purchased tourmaline rough and made unusual observations when cutting this material. We will keep you posted in future Newsletters.

The Urgent Need for Professional Development

It does not come as a surprise that major labs need sophisticated equipment and gemmologists with Ph.D.'s in their daily operations. As an educator I personally have great concerns about the use of such equipment as they are useful in very specific situations only. I warn every aspiring gemmologist to trust a machine alone. Almost 40 years ago I remember the advent of an electronic Diamond Colour Grader, a simple spectro-photometer. It worked on yellowish diamonds but as soon as the stone had a slight secondary (often indistinguishable) colour such as

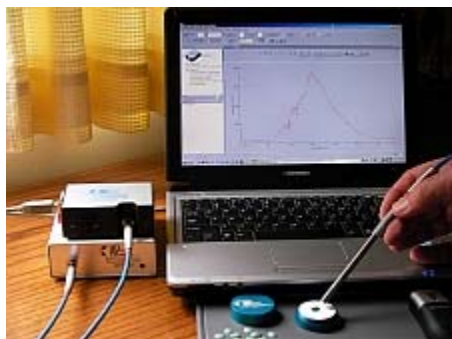
brown the instrument failed badly. Modern grading equipment have sophisticated algorithms to correct for these aberrations but I still have my doubts.

In gem identification the situation has become very challenging. A gemmologist without an immersioscope or at least a gemmological microscope and an immersion dish is fooling him/herself. Unfortunately there are few reference materials available with gem inclusion images under immersion. Sure you need expensive methylene iodide, smelly bromoform as immersion liquids and it is messy to clean up. But it is worth the effort.



Combined with solid gemmological training, an investigative mind and knowing your limits an experienced gemmologist should confidently identify 95% of stones and their treatments used in jewellery.

Gemmologists should not neglect the hand spectroscope. Both diffraction grating and prism spectroscope together with strong fiber-optics light source or more recently portable high power near full spectrum LED lights (with negligible absorption in the blue) are very powerful tools.



Professional gemmologists who do appraisal work need to invest in a UV-VIS and VIS-NIR spectroscope such as the [Ocean Optics USB](#) miniature line of spectrometers and a suitable deuterium/tungsten lamp; the cost for a portable package is less than \$ 6,000. Ocean Optics will provide assistance as these units are now widely used in high school science labs. Hook it up to one of those tiny netbooks and you have a neat expensive toy to carry around with you.

Someone with a good science background can learn how to use these instruments. On the internet you will find [databases with spectra](#), scientific articles, etc. to detect treatments of jadeite, clues as to country of origin and more. If you want a pre-configured package up to a Raman go to [Adamas Gem Lab](#). They also provide you with scientific data.

If you reach your limit of confidence admit to it and seek help. Talk to reputable laboratories, browse the internet and you may find an answer to your particular problem.



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Signs of the Time

Confused ? Why is there so much discrepancy in diamond certificates? The Andesine fiasco Paraiba tourmalines Irradiated topaz Synthetic beryl Perhaps it is time to start some professional development. Be yourself your best judge. Gain more confidence in diamond grading and gem identification. Take one of our 100-level courses by correspondence or locally in Vancouver (see below). More info about our "Fine Jewellery Expert (C.I.G.) program [here](#).

All A.G. (C.I.G.) diploma holders have access to our laboratory services. Through Gemlab Research and Technology (GLR&T, our internal lab facility) and international cooperation we are able to assist you in state-of-the art gem identification.

Past issues of C.I.Gem News

Click on the edition you want to read: [August 2008](#) - [September 2008](#)

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ISSN 0846-3611 GEMOLOGY CANADA - [Wolf Kuehn](#), Editor

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