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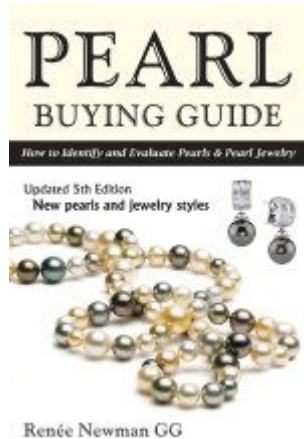
# CIGem News Summer 2010 - ISSN 0846-3611 GEMMOLOGY CANADA - [Wolf Kuehn](#), F.G.G., F.G.A., Editor

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

## From the Editor

Summer is upon us - without a doubt my favorite season. We have been busy in putting the final touches on our GL Gem Spectrometer; the first units have already sold and I hope that the affordable price will allow others to invest in this valuable electronic tool. It is still a "work in progress" but the hard-ware part is ready; read more below. Also new is the Accredited Gemmologist (C.I.G.)<sup>®</sup> Professional Development Program (AG-PDP) being offered in the fall.

## Pearl Buying Guide, 5th Edition



Renee Newman has just published an updated 5th edition of her popular "Pearl Buying Guide: How to Identify and Evaluate Pearls and Pearl Jewelry".

Initially published in 1992, the Pearl Buying Guide was the first book to give consumers details on judging pearl quality and value. The 207 new colour photos in this updated 5th edition show new types of pearls, clasps and jewellery styles. Updated information has been provided on natural pearls, treatments, cultivation and identification techniques, and a brief chapter on antique pearl jewelry has been added.

The 154 page book contains 207 colour photos, is easy to read, well-organized, and packed with fascinating information and photos. Price US\$ 19.95

You can order this book from our [on-line store](#) or directly [from the author](#).

I highly recommend Renee Newman's gem series of Buying Guides and Handbooks.

## Gemstone Purchases on eBay

A couple of weeks ago we made some purchases from an eBay dealer with good ratings to see how accurate the description of the items were and if the final price was a "good deal". Most of the websites selling gemstones have elaborate imagery with fancy appraisal certificates including movie clips like the following.

[Click here to start the movie in a separate window of your internet browser](#)

To see an enlarged image of the following certificates just move your mouse over the image.



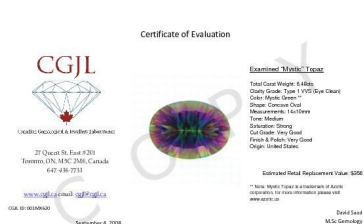
### Paraiba Tourmaline, 3.90 cts, Mozambique

Price \$ 61.00 (+ \$ 5 shipping)

The attractive stone had quite a vivid colour and came with a certificate stating: Estimated Retail Replacement Value \$ 4,680 and a Note: Stone tested for copper content.

We tested the stone with our GL Gem Spectrometer and found no presence of copper. If one reads the certificate carefully it states: ... "tested for copper" ...; it does not say "Cu-bearing tourmaline"!

Unfortunately many people think they are buying a Paraiba tourmaline based on the inflated appraisal.



### Mystic Topaz, 6.40 cts, United States

Price \$ 1.04 (+ \$ 5 shipping)

The certificate includes the following Estimated Retail Replacement Value \$ 356.00 and the Note: Mystic Topaz is a trademark of Azotic corporation; for more information [visit www.azotic.usa](http://www.azotic.usa).

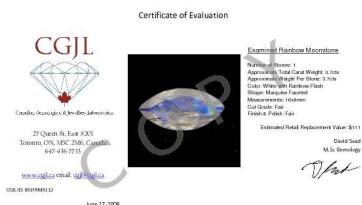
I think this was a "good deal" though the coating was not properly disclosed and the evaluation dramatically inflated as most of these appraisals are.



### Star Sapphire, 2.61 cts

Price \$ 5.50 (+ \$ 5 shipping)

The certificate suggests Estimated Retail Replacement Value \$ 206.00 and contains the Note: Stone has been diffusion treated for color enhancement.



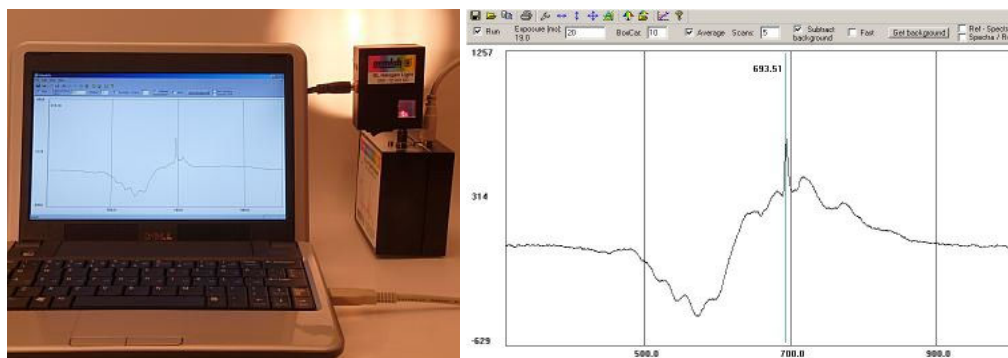
### Rainbow Moonstone, 3.70 cts

Price \$ 1.81 (+ \$ 5 shipping)

The Estimated Retail Replacement Value for this stone is \$ 111; it appears untreated. However, the stone looks almost "dead" and not nearly as attractive as in the picture.

In summary I would encourage everyone to visit eBay or other on-line gem dealers to see what is available. However, use caution and buy from reputable and professional businesses only.

## GL Gem Spectrometer System (300 - 1000 nm) - AVAILABLE NOW



Portable GL Gem Spectrometer system with Dell Mini 9" netbook. Raw transmission spectrum of synth. ruby (flame fusion, note emission peak at 693 nm)

Download the saved and archived GL GemSpec file (.rar) [FlameFusRuby.fak](#) and import it into the free [Spekwin32](#) spectroscopy software. More spectras will be posted soon.

We are proud to offer this economically prized and very efficient spectrometer package for the experienced gemmologist.

Over the last 3 years we have tested several spectrometers and numerous soft-ware packages. The high price of commercial systems excluded many gemmologists from owning and operating such a valuable tool.

With the help of a local engineer we custom designed a broad band gem spectrometer which is affordable and highly sensitive. It uses a back illuminated CCD sensor; the software compensates for etalation in the near IR. Our diffraction grating efficiency is optimized for 500 nm (see specifications below); at 300nm it is 35%, around 1000 nm it is 45% (with averaged efficiency for both polarizations around 55%). That is better than other units costing twice as much.

Also important is a proper light source though the spectrometer can be used with the fiber alone; spectroscopists often develop their own setup depending on the material and the type of measurement. For gemstone analysis a tungsten halogen light source, a xenon light, various types of lasers and UV-LEDs are being used. The GL Halogen 10W is a basic light source with built-in cosine corrector, cooling fan, gem positioner and is mounted directly onto the spectrometer; it can also be used with spectrometers of other manufacturers.

The GL Gem Spectrometer is a USB 2.0/HID compliant device and does not need a soft-ware driver as many other spectrometers do; the GLGemSpec software is simple to install (only 104 KB; it would work on an old labtop running Windows 98), easy to learn and extremely fast in obtaining and saving spectras. The included free Spekwin 32 spectroscopy software allows for quick viewing, comparison and documentation of a

project; we also provide LabView users with VIs for further development on their platforms.

For more technical data and description [go here](#).

### The GL Gem Spectrometer System Package



Portable GL Gem Spectrometer system includes attachable GL Halogen 10W Gem light holder, fiber probe (1 m laboratory grade UV-VIS), USB cable, 12 V power adaptor, software

**Available now: US\$ 1,695.00** for delivery in July 2010 (includes 1 hour video-conferencing assistance)

Limited Educational Pricing in US\$ with Free Delivery to continental US and Canada (HST included)

Please contact us before ordering to confirm availability; allow 3 weeks for delivery.

Order now on-line at [Gemlab Books & Instruments](#).

GL Gem Spectrometer (300 - 1,000 nm) with the GL Halogen 10W Gem light holder attached

Special price for A.G. (C.I.G.) diploma holders (in good standing), graduates from the AG-PDP program and students taking the GEM 250 upgrade course: US\$ 1,395.00 (until August 31, 2010)

### The GL Halogen 10 W Gem Light Source



GL Halogen 10W Gem light holder with built-in cosine corrector, cooling fan, includes 12V power adaptor; this unit is included in the portable GL Gem Spectrometer sets.

This unit has a SMA 905 coupler and can be mounted onto spectrometers of other manufacturers; please contact us for advice.

**Price: US\$ 285.00**

Order now on-line at [Gemlab Books & Instruments](#).

### Gemfair in Teófilo Otoni, Minas Gerais, Brazil - August 24 - 28



The annual and very popular FIPP2010 (20<sup>a</sup> Feira Internacional das Pedras Preciosas) will be held again in Teófilo Otoni, Minas Gerais, Brazil from August 24-28, 2010; for [more info go here](#); the C.I.G. will be represented at the show.

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### Vancouver C.I.G. Courses and Workshops - Fall 2010



### Introduction to Gemmology - **New!** for Fall 2010 - REGISTER by September 8

**Gemmology I and II** (\$995/30 hours, 10 sessions includes binder with study materials but not the text-books "Guide to Gems" by Oldershaw,

2004 (price \$ 14.95) and "Gemmology, 3rd edition, 2008" by Peter Read (price \$ 50.00) (no HST) - **NEW CLASS**

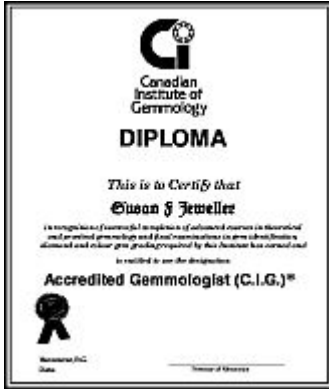
- Course GEM 110/120 Wed, Sept 15 - Nov 17, 6:15 - 9:00 p.m. (10 sessions, Vancouver)




This course combines GEM 110 and GEM 120 introducing the basic identifying features of all important gems, including their appearance, special physical and optical characteristics, their occurrence and value factors. Also included is an introduction to diamond and colour gem grading, the use of gemmological instruments to aid identification. GEM 120 covers the F.G.A. preliminary exam syllabus.

For more info go to [Vancouver Courses](#).

## Accredited Gemmologist (C.I.G.)<sup>®</sup> Professional Development Program (AG-PDP) - **New!** for Fall 2010 - REGISTER by August 15




The Canadian Institute of Gemmology is offering a self-guided study program for students who have completed a gemmology program with another institution.

Upon successful completion of the AG-PDP graduates are entitled to use the international recognized professional Accredited Gemmologist (C.I.G.)<sup>®</sup> designation - a [registered certification mark](#). 

Entrance requirement: "Fine Jewellery Expert (C.I.G.)", F.G.A. or equivalent from other international institutions; foreign candidates may apply but must enter Canada under a visitor's visa (no student visas available). If credentials were obtained before 2001 a practical entrance test must be passed.

Course credits required: all GEM 200-level courses such as GEM 210 Diamond Grading, GEM 220 Advanced Gemmology, GEM 230 Gem Colour Grading, GEM 250 Gem Identification II; for more info go to [Advanced \(GEM 200-level\) Courses](#).

GEM 250 Gem Identification II: For this course it is recommended that students have basic gem equipment at their disposal to complete individual projects at home or at their work place; students will also learn the use of UV- VIS - NIR spectrometers. There will be a four-day practical workshop at the end of the program; the last day will be exam-day for both written and practical exam.

We have reduced the price for several books to clear our inventory. Go to [Specials](#) or visit  [Books and Instruments](#).

Past issues of C.I.Gem News: Click on the edition you want to read:  [Spring 2009](#) - [Summer 2009](#) - [Fall 2009](#) - [Winter 2010](#) - [Spring 2010](#) . The next newsletter will be published September 21, 2010.

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