



# The Cutting Edge

Monthly Newsletter of the Ottawa Lapsmith and Mineral Club

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### Mailing Address:

PO Box 36042 Wellington,  
Ottawa, ON, K1Y 4V3  
Phone: 613-850-5486

### Website:

<https://olmc.ca/>

### Facebook:

<http://www.facebook.com/OttawaLapsmithMineralClub>

### Instagram:

<https://www.instagram.com/olmcnews/>

## President's Message

We took possession of our new workshop on December 6. Jean-Guy and friends subsequently constructed new work benches and a new Silversmithing table. We moved most of the workshop stuff on December 21. A new rock storage facility is currently being built. A new central table has been purchased and things are slowly being put away. The big saws will be moved on January 6 and we will downsize our storage locker on or after January 10. Making the final electrical connections is also planned for January 6. We hope to be up and running by mid January but that may be overly ambitious. A number of members still have items to be returned. If anyone would like to help, please contact Jean-Guy at [workshop@olmc.ca](mailto:workshop@olmc.ca).

Kerry Day

OLMC President

**REMINDER:** The membership period for 2024 ended on December 31. Members have until January 31, 2025, to renew for the whole year. It is still \$20 for a single membership that gets you access to the workshop, training offered through the club, field trips and other club events.

<https://olmc.ca/pdf/membershipform.pdf>

All members are invited to submit articles, proposals, and thoughts that could be included in the newsletters. Also, feel free to send your Classified ads by e-mail to: [news@olmc.ca](mailto:news@olmc.ca)

## That Feeling of Antici...

On December 6, the club took possession of the new workshop at 136F Billings Avenue, and construction started. The plan is to have the studio ready for members in January.

The insurance is paid, totalling \$2,850, which is a \$1,000 more than Colonnade. The increase is from the landlord's insistence of a policy that includes \$5 million/occurrence as opposed to the usual \$2 million/occurrence.

Workshop Chair Jean-Guy Bradette has led the team to construct new wooden workstations with overhead storage. There will be additional giveaways as the move continues and things are deemed to be surplus. Unclaimed items will be trashed.

There is a need for chairs of various kinds, short stools. If anyone has any donations, please contact Kerry Day [kaygeedeerocks@gmail.com](mailto:kaygeedeerocks@gmail.com)



*Jean-Guy Bradette and Janet Borzecki assemble a metal desk at the new studio.*



Photos of the Reception area and Silversmiths area from the entrance.

Photos by Kerry Day.





- From top left clockwise:
1. Hallway to the grinder room
  2. One corner of the grinder room
  3. Another corner of the grinder room
  4. Reception area with shelves, and entrance to the saw room
  5. Storage area in the saw room

Photos by Kerry Day.

## Member Profile: Darcy Paquet

I started crafting with stone when the club was at Bell Street, doing simple cabbing.

I wanted to do something different, so I did magic wands. I saw this book on magic wands, and I was interested. Some of them are very exquisite with turning (lathing), but I don't do turning. You find the wood at wood stores, KPG, outside. This wand is made of sumac and I have sumac in my back yard. Some of it is pine, some is glorified maple which is maple that has been heated so its dark and gives a nice colour. Some, the twigs themselves have flaws, and you go with the flaw. So, it's a lot of carving.

I used a dremel for some sanding, and for some, I used a dremel to cut away because it would take too long just to carve.



*Club Member Darcy Paquet while she volunteered at the 2024 Gem, Mineral and Jewellery Show & Sale*

Some of the wands have holes. You have to go with the flow. They all have character, so you try to find the character.

I find naming the wands gives people an idea of what the wand could. Like in Harry Potter they all have names. Some look like "The Unmaker", "Thunderstrike". You've got to look at the wand and see the name.

The "Celestia" was the one of the hardest to make.

The stones are glued, but some are embedded in the wood. Some have metal that comes from recycled serving trays. Some have leather. Because I have these multimedia things so I like to play with that. It's fun. It's something different.

If I priced my time, I couldn't sell them. Each wand starts square. And some of the wands are quite twisty. For one, the piece of wood was already crooked.

*Left: Some of the wands created by Darcy Paquet, mix of wood and stone.*



## Art of Keum Boo

Presented by Joy McDonell at the Silversmiths Meeting 2023-02-22

Keum Boo is an ancient art from east Asia, specifically Korea. It is technique of attaching gold to other precious metals. (In our case, it is probably silver). It has to be pure metals, not amalgams of any sort. "Keum boo" means "attached metal" in Korean.

I was really interested in the origins of this. I spent a lot of time trying to research [original artifacts and antiques](#), but I couldn't find much. There is one cup on display in the National Museum of Korea. The ancient Koreans believed that gold improves health. If you came in contact with it, or if you drank a cup lined with gold for example, then it would improve sore joints and alleviate bone pain. They also used it in jewellery to beautify the jewellery and to signify wealth. Probably they beat the gold down into a very thin slice of gold.

Pure precious metals readily bond together. That is why you must use pure gold foil, not leaf, to bond to pure silver.

This is one technique where there is a lot of online resources. It is a chance to use gold sparingly, and really make your jewellery look different and expensive. When you go online, you will find all sorts of instructors who say, "gold leaf", but that is not what you want. If anyone has worked with it, it is so thin. It is sold stuck on a tissue backing. You have to rub it off, then use all sorts of adhesives to get it onto picture frames and things like that.



*A square of gold foil shown during the presentation.*

Gold foil, on the other hand, is still very thin foil, but it is much thicker than gold leaf. A square of keum boo foil is reminiscent of the foil wrapper around candy bars. It has to be 24 karat or in some cases 23.5 karat depending on the manufacturer in order to work in this process.

The first foil I got was from [Cooksongold](#). [Rio Grande](#) sells it too, but only to wholesalers that have a license. If you decide to order any foil, get out your paper and pencil to do the math, because nobody's product is the same. A sheet of 4 1/3 inches square cost me close to \$300. Not cheap. When working with it, you probably should be careful to save every scrap.

You can roll your own gold foil! Are you familiar with the [maple leaf gold coin](#) from the Royal Canadian Mint? It's the size of a penny or slightly bigger. It is 1/20 ounces and costs \$279. You can roll it out and roll it and roll it, and get your rollers on the mill so close together, and even then it's way too thick. Then you have to sandwich it in two pieces of metal, and roll it through. Watch out for tears on the side while doing it. You also have to anneal it, which to me sounds scary because its so darn thin. If it tears on the side, you can



*12th-century gilt-silver cup from Korea's Three Kingdoms Period (57 B.C.- A.D. 668); photo from the [Permanent Collection of the National Museum of Korea](#)*

cut those parts, but it may not be handy if you are trying to get specific shapes. I haven't done it. I'm not sure if it is practical when you figure in all of the costs.

Bonding to pure silver, what are your choices? You can use fine silver, or sterling silver that is depletion gilded, or the PMC pure silver.

### Heat Source

You can use a beehive kiln, an ultralight kiln where the lid can be replaced with a brass lid. The other way that is very common is a hot plate. You might find a deal on the Amazon web site. The plate must go up to at least 650° Fahrenheit (338° C). That's quite hot when you are working with your bare hands or with gloves on. Use a copper plate to rest the piece on while warming it up. The copper will eventually turn an ugly black colour, but that has no effect on your piece.



*Photo of Joy McDonnell's copper hot plate.*

How do you know when it is hot enough? Test with a toothpick or something made of wood. Touch it to the top of the plate. If it chars and smokes a bit, then the plate is hot enough. You can also use a torch to heat the piece, but it takes some control. If the piece gets too hot, then the gold gets absorbed right into the silver.



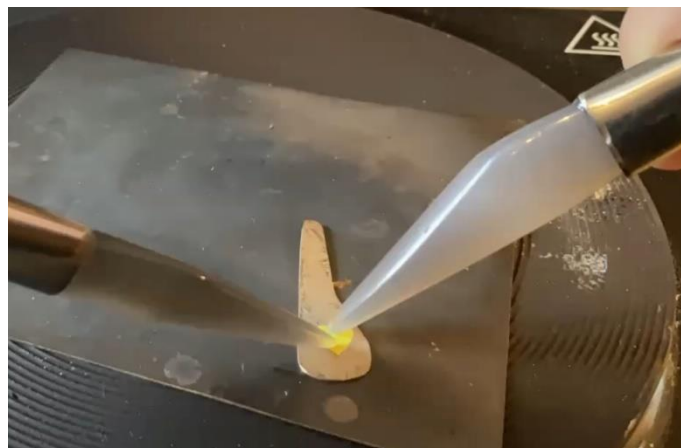
*Photo of tools to apply gold foil including burnishers and dental scrapers.*

### Apply the Gold Foil

When you apply the gold to the silver, it is a bonding process that needs high heat and pressure. This can be done with burnishers, and it can be done with metal. Many sites recommend agate burnishers, and they are very affordable. The problem is they are pointy, and it is better to have a rounder end. You might also use dentist's scrapers. You are going to need several burnishers, because you need to swap them out. They will get hot, and if they get too hot, then the gold will stick to the burnishers.

You need gloves, a steel block that is used for cold burnishing and cool the agate burnishers because they get very hot, very fast. You need a great pair of precision tweezers, and a small pair of scissors, and a soft brass brush.

What will you do with the gold foil? When cutting it, the foil should be inside an envelope of tissue paper. You will be cutting it with those little scissors to apply to a certain spot of your silver. You could tear it, just pull it off if you are looking for an abstract



*Gold foil is applied to a piece of hot silver.*

pattern. Or you could use punches that cut out shapes. You can also use eXacto knives, but they can pull a bit on the foil.

Hold your piece of gold down on the silver and tack it with one burnisher or fiberglass brush. If the gold is not sticking to the piece, then you need more heat. Then start rubbing the gold from the centre to the edges with the other burnisher. Make sure you get to the edges. It will make little burnishing lines during this process, but they will disappear later on. The step takes 20-30 seconds.

When you are done rubbing the gold on, use the tweezers to move the piece to the steel plate. This cools the metal down very fast. Then cold burnish just to finish, and make sure the gold is down. Pay special attention to the edges.

You can put the gold on your silver piece before heating the pieces up. You have maybe 30 seconds to position the gold before it gets too hot to move.



*Silver pendant with gold heart detail by Joy McDonnell*

### Keum Boo Hot Tips

- Extra work getting the gold to stick. Some people talk about using a damp brush, some moisture to get it stuck. Some people say gum arabic with distilled water is best. It may not be necessary. If you do add water, then you must let the piece sit for 24 hours to dry.
- Brass brushing the gold will make the burnishing lines disappear. You can also polish the gold at the end. Also, it is a real no-no to leave your fingerprints on the gold.
- Sometimes on larger pieces the gold foil will bubble. Prick the bubbles with a needle and burnish some more.
- Keum boo looks great on textured silver (not too deep). You can also try texturing after the gold is applied.
- Sometimes there is not a lot of contrast between gold and silver. Try using a patina on the silver change the colour. It does not affect the adherence of the gold.

You want to make the keum boo almost the last step of your piece, but before you set any stones. All of the soldering work on your silver is already done. Sometimes it cannot be the absolute last step, but you run the risk of melting the gold and ruining the piece. Patina can be done after keum boo without a problem.



*Silver earrings with patina and abstract gold foil by Joy McDonnell*

### Recommended Reading

Keum-Boo on Silver: Techniques for Applying 24k Gold to Silver, by Celie Fago (2008, 70 pages). The book includes some advanced techniques.

On-Line Resources: There are many, many videos from many people. You will learn something from every video.

## Equipment for Sale

Lynda Lafontaine ([lynda.lafontaine67@gmail.com](mailto:lynda.lafontaine67@gmail.com)) has equipment for sale. If you are interested, please contact her.

two 12 lb tumblers: \$250 each

6 lb. Tumbler: \$200

4 lb. Tumbler: \$150

Rock saw, older cast aluminum, with guard: \$200

Various jars of grits. Approximately 30 baskets.



## Krennerite

Krennerite is a rare gold telluride mineral (contains tellurium atoms with two extra electrons or  $\text{Te}^{2-}$ ). It can have variable amounts of silver in the structure. The formula is  $\text{AuTe}_2$ , but specimens with gold substituted by up to 24% with silver have been found. Both of these chemically similar gold-silver tellurides called calaverite and sylvanite are in the monoclinic crystal system, while krennerite crystals are orthorhombic.

It has a metallic lustre. The color varies from silver-white to brass-yellow, and streaks greenish grey. It has a specific gravity of 8.62 and a hardness of 2.5. It occurs in high temperature, hydrothermal environments. It was first discovered near the mountain village of Săcărâmb, Romania.

Famous Hungarian crystallographer József Sándor Krenner had named this mineral "bunsenine" after Robert Bunsen, but it was renamed after Krenner in 1877, to prevent confusion with another mineral named bunsenite.



Photo of krennerite by Rob Lavinsky, [iRocks.com](http://iRocks.com) – [CC-BY-SA-3.0, CC BY-SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/).



**Contact:**

**President**  
Kerry Day  
[pres@olmc.ca](mailto:pres@olmc.ca)

**Vice-President**  
Matthew Poirier  
[vicepres@olmc.ca](mailto:vicepres@olmc.ca)

**Secretary**  
Bill Hendrick  
[sec@olmc.ca](mailto:sec@olmc.ca)

**Treasurer**  
Catherine Garrett  
[treasurer@olmc.ca](mailto:treasurer@olmc.ca)

**Workshop Chair**  
Jean-Guy Bradette  
[workshop@olmc.ca](mailto:workshop@olmc.ca)

**Membership Chair**  
Nathalie Bourget  
[memberchair@olmc.ca](mailto:memberchair@olmc.ca)

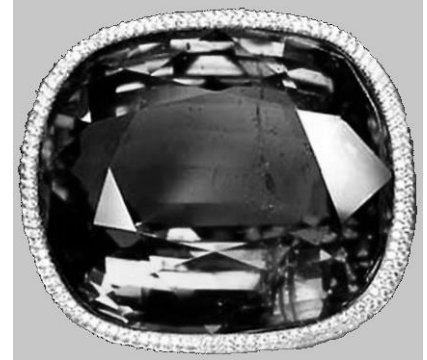
**Show Chair**  
Stéphane Jetté  
[showchair@olmc.ca](mailto:showchair@olmc.ca)

**Newsletter Editor**  
Eric Clara  
[news@olmc.ca](mailto:news@olmc.ca)

**Auction Team**  
[auctions@olmc.ca](mailto:auctions@olmc.ca)

## Blue Giant of the Orient

The Blue Giant of the Orient is a cushion-cut cornflower blue sapphire surrounded by a pavé-set of small diamonds in a platinum brooch. As the largest faceted sapphire in the world, the Blue Giant of the Orient is a massive 466.52 carats, and measures 6.35 cm long, 4.44 cm wide, and 1.9 cm at its thickest point. It is one of the three largest sapphires from the Ratnapura region of Sri Lanka. When it was discovered in 1907, the rough sapphire weighed more than 600 carats.



*A black and white image that is probably the Blue Giant of the Orient*

At the time, it was purchased by major exporter O.L.M. Macan Marker & Co., who then sold it to a private collector. The stone was not seen again in public until 2004, when it was put up for auction at Christie’s Magnificent Jewels Sale in Geneva, Switzerland, where it was identified as a stone from Kashmir. It did not sell at the auction. It was purchased after in a private sale by an unknown buyer.

## Workshop Schedule

### January 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	10	21	22	23	24	25
26	27	28	29	30	31	



# OLMC Membership Application

New Membership  Membership Renewal

Individual **\$20**

Family (2+ persons in the same residence) **\$30**

**Benefits:**

Monthly Newsletter

Newsletter advertisement: \$25 per year for members or \$55 for businesses  
*(Ten quarter pages per year over ten newsletters).*

OLMC online auctions

OLMC field trips

*More information can be found at <http://www.olmc.ca>  
You can also go on our Facebook page: [OttawaLapsmithandmineralclub](#)*

Names(s): \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ Province: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Telephone: \_\_\_\_\_

Please specify your e-mail address to receive OLMC's newsletter:

\_\_\_\_\_

Do you require a receipt?

Yes

Payments are payable by **cash, cheque** to Ottawa Lapsmith and Mineral Club, or  
**E Transfer** at [treasurer@olmc.ca](mailto:treasurer@olmc.ca) with the application form

Please mail your membership form and fees to:

Ottawa Lapsmith and Mineral Club  
P. O. Box 36042 Wellington, Ottawa, On K1Y

4V3

*Please note that all membership information is used only for administrative purposes.*

Administration use only

Card provided:  Yes  No

Supervisor signed:  Yes  No

Date: \_\_\_\_\_