



The Cutting Edge

Monthly Newsletter of the Ottawa Lapsmith and Mineral Club

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President's Message



I would like to thank all of the executive, board members and volunteers who made 2023 a success.

Kerry Day
OLMC President

Upcoming Meeting for Gem Show 2025

The gem show committee will meet via Zoom on Thursday, January 25, at 19:00. All club members will be invited, and are welcome to join in. Watch for the e-mail with the URL.

Reminder: Membership cards that were purchased before 2023 will expire on December 31. Please renew your membership before January 31, so you can keep receiving announcements, invites, and the newsletter.

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

Club Meetings Need Organizers

At present, neither the Silversmiths group nor the Mineral Interest group are holding on-line meetings. Both groups are looking for someone who would be willing to organize future meetings, not necessarily to host them. Perhaps you would be interested in taking on of these lead roles. If so, please contact pres@olmc.ca

Results of the Holiday Auction

Many thanks to everyone who participated in the November auction. Here are some statistics and images from the site.

The most heavily bid on lots were: Faceting Rough including Sphene /Titanite; Euclase, Benitoite and Petalite (21 bids); Leopard Jasper slab (16 bids), Dinosaur Bone (15 bids), and a tie between faceted oval .45 carat Tanzanite and 669 grams of tumbled Tourmaline (14 bids).

Four of the five most expensive lots were also in the top bid upon: the Tanzanite (\$120); the Dinosaur Bone (\$111); the tumbled Tourmaline (\$102); and the faceting rough (\$83). A flat of minerals went for \$72.



Lots clockwise from top left: leopard jasper, flat of minerals, tanzanite, tumbled tourmaline.

Rokua Geopark, Finland



Rokua UNESCO Global Geopark is located in Northern Finland, between the cities of Oulu on the Gulf of Bothnia, and Kajaani in the interior. It is about 200 km south of the Arctic Circle. It is one of four UNESCO geosites in the country.

This park shows the gradual development of the rocky terrain starting from underneath a kilometer-thick ice sheet to the deep bottom of the ancient Baltic Sea, then an island and shoreline stage, and finally the present inland area.

The UNESCO Global Geopark includes a number of impressive bedrock sites, which are used as examples of the main development stages of the Fennoscandian bedrock area. In addition, the area has in Finnish conditions an exceptionally diverse and high quality range of landscape forms that arose during the time of the ancient continental ice sheet and its melting stage as well as during the uplift process that followed it. The landscape consists of a changing, varied mosaic of thousands of geological formations, including drumlins, hummocky moraines, terminal moraines, esker ridges, kettle holes, ancient shorelines, dunes, ravines and bogs. The UNESCO Global Geopark forms a geological corridor that follows the Rokua esker field and runs in a northwest-southeast direction. The northern border is River Oulujoki, while in the south the area is bounded by the Rokua esker formation.

In addition to the geology, the areas are also connected by the prehistory of the people who followed the withdrawal of the ice sheet and sea.

The UNESCO Global Geopark includes three municipalities; Muhos, Utajärvi and Vaala. Close to the UNESCO Global Geopark are two of Northern Finland's significant urban centers. To the northwest, Oulu, the regional center of Northern Ostrobothnia, is Finland's sixth largest city with around 196,000 inhabitants. To the southeast is the city of Kajaani, the center of Kainuu Region, with a population of around 38,000.

Rokua's special arctic character, long winter and Finnish traditions make it interesting for diverse visitors to experience. During the winter months, in the middle of a snowy landscape and frozen lakes, one can get a touch of a way of life and scenery of the ice age.



A forest trail in Rokua Geopark. Photo from nationalparks.fi

<https://en.unesco.org/global-geoparks/rokua>

Experiments in Salt Water Electro Etching

Presentation by Vera Rehill in the Silversmiths Meeting 2022-05-31

There are a few original videos on YouTube, but many copies of those originals. Few people are experimenting with etching. It is very inexpensive to do.

You will need some electrical wire. A lot of electrical wire purchased in stores is coated with an insulating plastic. The ends of the plastic must be removed.

Any A/C electrical adapter can be used, like an old cell phone charger (and a magnifying glass to read the details on the adapter). Check out Value Village and their bin of adapters. The recommended voltage for etching is between 5-6 volts. Make sure your adapter uses copper wires, and not some other metal like aluminum.

Most adapters have two wires encased in insulating plastic. Cut the end off to expose the wires and pull them apart. You need to know which is the positive wire and which is the negative wire. The positive wire may be indicated by a pattern of dots. The negative wire may have writing on it. Mark the wires somehow so that you do not forget.

Use a wire stripper to strip clean about 5 cm of the positive wire. If the wire is made of multiple strands, then twist them together. Do the same for the negative wire.

You do not need alligator clips, but you can get them coloured red (labeled positive) and black (labeled negative). Get a couple of them in case one set does not work. You can attach the wires with electrical tape or solder. If soldering, use a soldering iron and not a torch.

Although the wire will not have high voltage, getting shocked is an unpleasant experience, so take precautions.

Make salt water in a mason jar by combining the salt and water in a 1:5 ratio (one part salt, five parts of hot water). Let the solution cool.

Make sure your copper piece is clean. Wear gloves when handling the metal to prevent getting oil on it. Coat a piece with nail polish or sharpie marker ink, then use a file or pointy

Things You Will Need

- distilled water (five parts)
- non-iodized salt, such as kosher salt (one part)
- glass mason jar
- sharpie marker or nail polish and nail polish remover
- a pointy tool to scratch designs
- duct tape or packing tape
- small AC electrical adapter
- small fan for ventilation
- 18-gauge wire that is very clean for good electrical conductivity



Photo of an example of a power adapter with wires attached to alligator clips



Etch a design in the metal piece. Then immerse it into a prepared salt water solution, across from a looped wire that will be electrified.

old dentist's tool to scratch a design in the nail polish. You are scratching off the nail polish to expose the metal. It is okay if the metal is scratched a bit during this process. To get fine lines, mix a blob of nail polish and a drop of nail polish remover on a throw-away surface. Use an old paint brush with a thin tip to mix them and apply the mixture to the surface.

Use tape to cover up all parts of the piece that you do not want etched. This could include the edges and the back.

Attach 18-gauge wire to the piece with tape. It is recommended to use pliers to loop the end of the wire that will be attached. Make sure that wire is attached very well. NOTE: this wire will also be "etched" during the process, so watch out!

Lower the piece into the salt solution in the mason jar. Bend the attached wire to hang it over the lip of the jar. The piece should be completely immersed and surrounded by the solution.

On the other side of the jar, directly opposite your hanging piece, hang a loop of very clean, thick-gauge wire that is looped. The part of your piece that will be etched must face this other piece of metal.

WARNING: The etching process will create a small amount of chlorine gas. Make sure there is adequate ventilation in your work area, and that you take adequate precautions for breathing.

Take your power adapter. Attach the positive wire to your piece to be etched. Clip on the alligator clip or wrap the wire around the wire hanging over the lip.

Attach the negative wire to the other wire on other side of the jar. Make sure that the positive/negative wires do not touch each other, and also that the two positive/negative pieces do not touch each other in the mason jar. Plug in the adapter.

If everything is connected properly, then the "negative" wire should start bubbling up the solution. If your piece to be etched starts bubbling, then you know that positive and negative wires have been mixed up, so unplug everything and swap the wires.

After some time, disconnect the power, remove the metal, and clean it thoroughly. Remove the sharpie ink and/or nail polish and tape. Admire your work.

Toxic residue will collect at the bottom of the mason jar. Use a turkey baster to siphon out most of that and put it in another jar that can be disposed of properly. The salt solution can be used many times over. Add more distilled water and salt as needed.

El-Dorado Topaz

The “El-Dorado Topaz” is a huge, faceted topaz, and apparently is the largest faceted gemstone in the world. The yellow-brown stone was found in Brazil’s famous southeastern Minas Gerais region in 1984. Originally it weighed 37 kg. the poor quality stone was faceted into a classic flawless emerald cut, finally weighing 6.2 kg (31,000 carats). Still, it is far heavier than the next largest faceted stone, the “American Golden Topaz” that weighs a still impressive 8,100 carats.

Weirdly, it is difficult to find more information about this stone on the Internet. It might be in the Special Exhibitions Gem Collection in the Royal Collections Museum in Madrid, but no listing can be found. It might be on display in the British Royal Collection in London, but again no reference. And apparently there is only one picture of it shared by every blog. In conclusion, the gemstone is aptly named after the mythical “lost city of gold”.



Not the "El-Dorado Topaz", but what a topaz may look like. Topaz crystal on white matrix; Parent Géry, Creative Commons Wikimedia



Rhodochrosite on Matrix from Peru, size 4x2.5 cm; photo by JJ Harrison, Wikimedia Commons, Wikipedia, 20 September 2019

Rhodochrosite ($MnCO_3$)

Usually rosy red colour but can range from pink to light brown. It can be confused with rhodonite ((Mn^{2+} , Fe^{2+} , Mg, Ca) SiO_3), but it is much softer with a Mohs hardness of 3.5 - 4. Crystal twinning is common.

It was first found in a silver mine in Romania in 1813, but mostly it is found in South Africa, China and the Americas. Rhodochrosite is formed by the oxidation of manganese ore. It occurs as a hydrothermal vein mineral with other manganese minerals. It is also a biomineral, as lichen species *Lichenothelia* spp can oxidise manganese and iron in metal-bearing minerals where it grows.

Poor quality specimens are used as a source of manganese in certain steel and aluminum alloys. High quality banded stones are used for decoration and jewellery, but its softness and cleavage make it a poor choice for faceting.

Crystal Healing: An Overview

Crystal healing is a pseudoscientific alternative-medicine practice that uses semiprecious stones and crystals such as quartz, amazonite, fluorite, or opal. Adherents of the practice claim that these have healing powers, but there is no scientific basis for this claim. Practitioners of crystal healing believe they can boost low energy, prevent bad energy, release blocked energy, and transform a body's aura.



Colourful and flashy labradorite is known as a "stone of transformation" and "stone of magic" with power to heal, protect, and produce energy. It is associated with Third Eye chakra and Crown chakra.

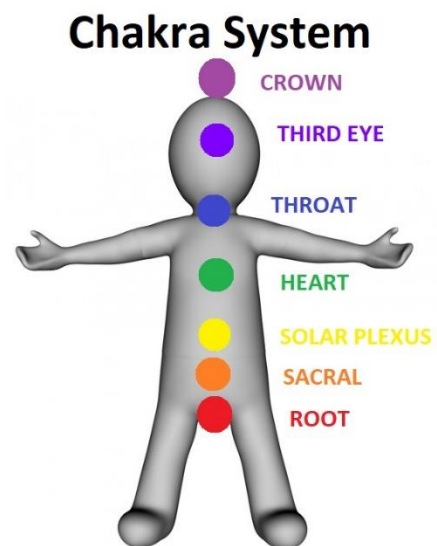
Across cultures, precious stones have been used as representations of certain human conditions, and as sources of mystical power to invoke certain conditions. Ancient Sumerians purportedly used crystals, stone figurines, and animal parts in their magical formulas for health, love, and luck. In Plato's account of Atlantis in "Timaeus", in a description of the world made up of four elements -- fire, air, water and earth -- combining and separating, crystals are described as water which is formed "into two kinds; the one liquid and the other fusile." The link between the mythical Atlantis and crystal power came from American clairvoyant Edgar Cayce in the 1920s, whose "dream trances" told him that Atlanteans used a giant crystal to collect solar power to run their city. Ancient

Egyptians attributed metaphysical properties to precious stones and crystals for health and protection. They would bury amulets or other jewellery with their dead for use in the afterlife.

But the attributes of stones can differ between cultures. In Egypt, it was believed rose quartz could prevent aging, but Romans used rose quartz as a seal to signify ownership, while in the Middle Ages, it was used in healing potions, and to modern practitioners, rose quartz is the "love stone" used to balance emotions, especially anger and disappointment. Sapphires were believed to protect ancient Greek and Roman royalty from envy, while some clergy in the Middle Ages wore the stone to symbolize heaven, but today it is associated with wisdom, mental stimulation, and purity of thought. There are many web sites with charts listing all sorts of stones and their associated meanings and purposes.

The practice of modern crystal healing is dependent on one's own personalization and creative expression. Physical properties of a stone can modify its attributes and strength, such as shape, color, markings, whether it is a rough natural crystal, or has polished crystal faces, or no faces.

There are several ways to use crystals. One popular method involves seven bodily chakras representing energy fields connecting to the energy of the universe.



Stones of the appropriate colour and shape are placed on or near these points of the body to open up the energy flow. Alternatively, the stones might be placed around a body to create a surrounding energy grid. Many people simply carry stones on or near their person: in pockets and purses, as parts of necklaces, rings, and bracelets. Practitioners might display stones in certain parts of the house or workplace, perhaps a crystal pendulum or prominent boulder. They might also be used as part of a meditative ritual at certain times of the day.

If you are interested in exploring further into crystal healing, there are many resources on the Internet, in book stores and libraries, and at mineral clubs and gem shows.



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SilviaFindings has been a manufacturer of sterling silver and gold settings since 2004. We have a large variety of settings in various designs, shapes, and sizes for earrings, pendants, rings, and bracelets.

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“Ring of Fire” Mining News

More than 31,000 mining claims covering 626,000 hectares are now registered in northwestern Ontario's Ring of Fire area in the James Bay lowlands, according to provincial data analyzed by the non-profit conservation group Wildlands League. In 2022, there were 24,000 claims.

Exploration companies from around the world are competing for lucrative lithium deposits and other metals related to battery production. More than half the claims are held by Ontario-based battery and electric metals explorer Juno Corp.

At the same time, a [labour shortage is predicted](#) for the mining industry and other services on which it depends in Ontario. A study by the Ontario Mining Association (OMA-OLMP) concludes that increasing turnover and replacement mean more new workers are needed. It is difficult to attract people to the mining industry because of the need for specialized skills, living and working in remote environments, and the perception that mining is dangerous.

<https://www.geologyontario.mndm.gov.on.ca/ogsearch.html#mining-claims>

<https://www.cbc.ca/news/canada/thunder-bay/ring-of-fire-mining-claims-rise-1.7051094>

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Workshop Schedule						
January 2024						
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	20
21	22	23	24	25 Gem Show Committee 19:00h	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).

Silversmith online meeting 2/month

Mineral Interest Group online monthly meeting

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](https://www.facebook.com/OttawaLapsmithandmineralclub)

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