



The Cutting Edge

Monthly Newsletter of the Ottawa Lapsmith and Mineral Club

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President's Message

The club has received a huge donation (5 vehicle loads) of lapidary rock, silversmithing supplies, books, grit, tumbler, saws, blades, grinders, polishers, faceting machines and supplies from the estate of an old club member Liette Gauthier. Thanks goes out to Colin Geitzler, Eric Clara, Steve Souliere, Stephane Jette, Don Fougere and myself for hauling it out of a basement and bringing it to the workshop. More thanks goes out to Don Alp for putting a lot of it away into his new cabinets.

We will be having a special machine auction in late April to get rid of machines, books and supplies we just don't have the room for.

A reminder that the current auction ends Saturday April 4, at 6:00 PM. To date, it is grossing \$2,900.

As of this writing no one has stepped forward to be our Vice President. It is an easy job. You show up to three Zoom meetings/year, add your two cents worth, and you get a 1/5 say in how club funds are spent.

Kerry Day

OLMC President

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

Grateful club accepts generous donations

The club thanks William Palmer of Montreal, for donating an almost new 10-inch oil saw to the club. The club also thanks Jim Taggart of Kemptville, for his donation of rocks and minerals to the club including a large block of malachite.

Phanlert Panaram donated a large quantity of Silversmithing tools and motors. Workshop Chair Donald Alp will sort and clean them. Notable items are a rolling mill and a polishing hood. Thank you for the donation.

A full pickup truck of mineral specimens, slabs and tumbling rough was donated graciously from the estate of a former club member located in Orleans. There is again as much quantities rock saws, tools, books, and machinery – ten machines and many accessories. Many thanks.



Annual General Meeting this month

The AGM is scheduled for **April 12**. All active club members are encouraged to attend and to participate. In this meeting, we elect the Executive Committee board. Open positions include President, Vice-President, Secretary, and Treasurer. The Executive will also take nominations for the Chair positions: Workshop, Membership, Gem Show, and Newsletter.

Any club member can run for any position, but please announce your intentions ahead of time. Information about the various positions was published in the [January newsletter](#), but anyone can simply ask the current committee members. As of this writing, there are no nominees for Vice-President, and Kerry Day will not run for President.

Time: Sunday, April 12, 2:00-4:00 p.m

Place: OLMC Workshop, 136F Billings Avenue, Ottawa

A Zoom meeting will be set up for members who cannot attend in person. The URL will be sent by e-mail to all active members.

Geo-Heritage Days Coming in September

Towards the end of every September, Carleton University Department of Earth Sciences celebrates Geo-Heritage Day by hosting volunteer presentations at notable geological locations around the city. There are dozens of amazing locations with fascinating geology or the use of local stone in historical buildings.

<https://geoheritageday.carleton.ca/>

<https://www.capitalgems.ca>

Computer Storage Medium of the Future: Glass?

sGlass is used for practical objects like tableware, decorative objects like windows, and technological applications like magnifying glasses and vacuum tubes. Scientists are testing to find out if glass can also solve the problem of computer storage.

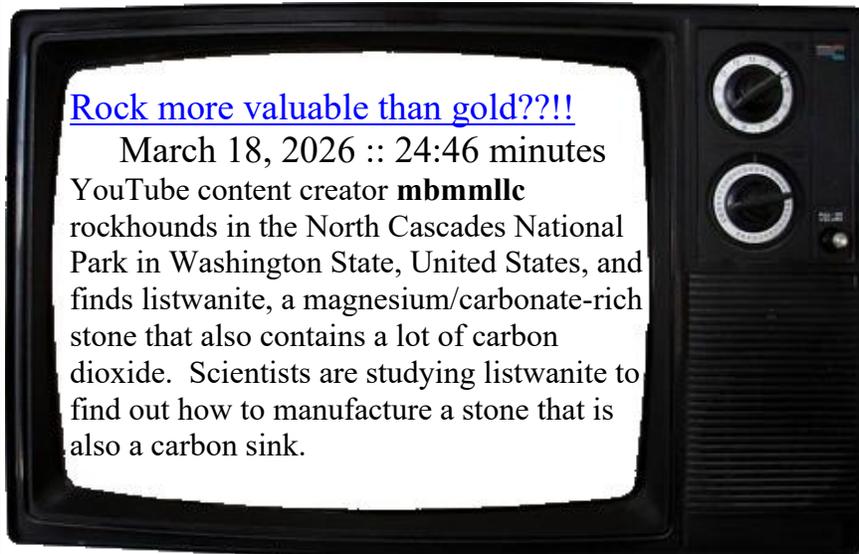
In computing, good archival storage is dense, durable, stable, and needs no energy when not being used. Silica glass, used in 90% of everyday products, may be too fragile and flawed for the job. Instead, the search is on for a different material to make a type of glass that is chemically stable and resistant to moisture, temperature, and electromagnetic interference.

Another problem to overcome is how to write information into the material and read it at high speed and cheaply. Now femtosecond lasers are being used to send millions of light pulses per second into a piece of glass to create three-dimensional features that can be interpreted as binary code (voxels).

Two methods of write and read voxels in glass are being tested now. One method uses birefringence, refracting light depending on how the voxel, an oval-shaped void in this case, has polarized by the laser. The second method is to use different frequencies of laser pulses to change the magnitude of refraction in the glass.

So far, the performance is not great. Microsoft has a system using four lasers that can write 66 megabits per second into a thin borosilicate glass slab. Their engineers think a system of 16 lasers could take 150 hours to write 4.84 terabytes into a 12 cm x 12 cm x 2 mm thick slab. Every day, over [400 million terabytes](#) of new data is created on the Internet in 24 hours. On the good side, theoretically that slab would survive for 10,000 years at room temperature.

Read the original article on [ArsTechnica.com](#)



You got a new wheel...

These wheels are made with aggressive resin bond, which results in a rough texture with sharp points. They need a break-in period before working on cabochons or other stones.

Using these wheels without breaking them in can cause a scratchy finish.

To break in your wheel:



Fresh out of the box

1. Make sure to use plenty of water on the wheel. Do not do this work when it is dry.
2. Sand and polish a large piece of agate or something else with an 8-9 hardness on one side. The stone should be something with little value. It should have one rough side and one smooth straight edge.
3. Use the rough side of the stone on the wheel to remove excess resin bond that contains protruding diamonds, and to smooth down all sharp points.
4. Use the smooth straight edge of the stone straight to even out the surface of the wheel. Do not push the sharp edge of the



Ready to use like sneakers

stone into the wheel, because it is likely to strip the resin right off. Do not try to smooth the wheel entirely as it will cause excessive wear.

From the Library...

While they were camping here, curious Indians came to visit them. One of these named Cognac spoke of a great rock that stood close to the shore of the lake. There, Cognac said, native ore was to be found, and from this his tribe made its bullets. De Troyes and his friends were not particularly interested, but they allowed the Indians to take them along to see the rock. It did not look very different from the stony hills that they had seen so many times before on their trip.

Bernard L. McEvoy
Canada's Buried Treasures

58th ANNUAL OLMC GEM and MINERAL SHOW



September 19-20, 2026
Nepean Sportsplex

Migmatite and the story of diagenesis

Migmatite is a composite rock made of two distinct components: a light-colored part rich in silica and lighter elements (granitic or felsic) known as the “leucosome” and a darker, more iron-magnesium rich and plate-like part known as the “melanosome.” The leucosome is formed by partial melting of the original rock, often reaching temperatures close to what is needed to form granite. The melanosome is the solid-state, non-melted and mostly unchanged part.

Migmatites often appear as tightly, incoherently folded veins known as ptygmatic folds. Ptygmatic folds tight, often irregular shapes resulting from intense compression and shearing forces. There is a pattern of alternating light and dark layers.

Most often it is found in high-temperature metamorphic environments, regions that have experienced intense geological processes including mountain building or plate tectonic activity. The separation of



Intricately-folded migmatite from near Geirangerfjord, Norway; photo from Wikipedia by Siim assumed [CC BY-SA 3.0](#)

the leucosome and melanosome components reflects the separation of melted rock from solid residue, contributing to the formation of different rock types.

Migmatites may have economic importance if it contains enough minerals. For example, the leucosome may contain a lot of quartz, feldspar, or mica.

How migmatite forms is a complex combination of high temperatures, pressures, and geological processes (diagenesis). It starts in the Earth's crust during a continental collision or a mountain-building process with high pressure and heat leading to metamorphism. As the heat and pressure increase, some minerals melt (likely quartz and feldspar), or partially melt, or remain solid. The melted parts start to move and pool, forming the light-coloured leucosome. The rest of the rock becomes the melanosome. Partly molten rock might move through veins and fractures to create a network or banded layers of leucosomes. As the pressure and heat subside, the stone solidifies and may start to crystallize (quartz, feldspar, mica). The end result is the migmatite.

In Ontario, you can find migmatites in the Muskoka Domain in the southwestern part of the Grenville Province, east of the Georgian Bay.

Sourced from [Wikipedia](#) and [Geology Science](#)

Volcanoes of Kütralkura

About seven hundred kilometres south of Santiago de Chile, lies the [Kütralkura UNESCO Global Geopark](#). This park, designated in 2019, spans 8,053 km² in the Andean area of the Araucanía Region, in what is known as the Southern Andes Volcanic Zone.

This name comes from two native Mapuche words: kütral (fire) and kura (rock). The name is a reference to the region's incredible geologic. The dynamic landscape includes glaciers, lakes, rivers, forests, wetlands, grasslands, volcanic slag zones, and tall mountain peaks.

The western limit of the park is less than 15 km from the center of the city of Temuco, capital of the Araucanía Region. It borders the Biobío Region on the north side, the border of Argentina in the east. The park contains four communes (administrative subdivisions): Curacautín, Lonquimay, Melipeuco, and Vilcún, all of Conguillio National Park and Llaima, one of Chile's most active volcanoes.

The geological history of the Kütralkura Geopark starts approximately 300 million years ago. As the Nazca Plate moves below the continent of South America, it creates intense seismic and volcanic activity that today are observed in the active volcanoes Tolhuaca, Lonquimay, Llaima and Sollipulli. Yet, this area has been inhabited for at least two thousand years by the Pehuenche People and the Mapuche People. There is a challenge of learning to live with active volcanoes and to be familiar with the geological hazards.

Geologic Periods of Kütralkura

180M: Strata of Huencual Ivante (Pre-Jurassic)

180-165M: Formation of the Springs of the Biobío (Jurassic)

75-25M: Vizcacha-Cumilao Complex (Cretaceous-Paleocene)

20-11M: Formation Cura-Mallin (Lower to middle Miocene)

20-11M: Strata de Hulchahue (Lower to middle Miocene)

9-8M: Formation Mitrauquen (Upper Miocene)

5-1M: Eastern Precordillera Volcanic Association

5-1M: Formation Malleco (Pliocene-Pleistocene)

2.6-0M: Quaternary Deposits Set by volcanoes in the Cordillera Principal (Holocene-Pleistocene)



The peak of Llaima Volcano, Conguillio National Park; photo from [Chile-Reise](#)



Tolhuaca Volcano; Photo by Mono Andes from Flickr, CC BY 2.0, [Wikipedia](#).

Ascend to the top of the Volcanoes (and bring lunch)

There are guided tours of Llaima volcano from Pucón, and Sollipulli Volcano from Cunco. Llaima is 3125 meters above sea level. Despite fantastic views of surrounding volcanoes, lakes, and forests, the second most active volcano in Chile is reportedly not well-travelled. The

Sollipulli volcano has the largest crater in all of South America, and is home to a glacier that is one of the main sources of fresh water for Araucanía. On the way, trek through thick forests and the remains of previous eruptions. There is a selection of full day trips to the tops of other volcanoes in the park including Quetrupillán, Villarrica, and Lanin volcanoes. Villarrica also has a lava cave tour near the top.

Soak in the Geometric Hot Springs (and bring swimwear)

Near Pucon, the Geometric Hot Springs pour from a half kilometer gorge in the forest in south Villarrica National Park. Architect Germán del Sol made geometric constructions of wood and other natural materials to create a harmonious environment with the landscape. There are seventeen stone pools filled with thermal water ranging from 45 °C to 89 °C.

Evidence of Life Under Water

Marine fossils approximately 180 million years old have been found in the town of Lonquimay near the Malalcahuello-Naicas National Reserve and Lonquimay Volcano. This shows that the land was covered by the ocean at that time.

River Rafting in Curarrehue

If you don't mind paddling a bit, one way to see a lot of landscape is to take a three-hour tour rafting down the Trancura River. If you are willing to pay a bit more, the tour company will provide the paddle, a life jacket, and a wet suit. There are two parts: the high part with exciting and treacherous rapids, and the low part with milder rapids and more wildlife.

Horseback Riding through the Carhuello Mountain Range

Another way to appreciate the landscape is on horseback. One tour starts in the forests and pastures along Llucura river before turning into the Carhuello mountain range. On the way, the tour passes several of the well-known volcanoes and a waterfall. Tourists are expected to have some experience around horses, and weigh less than 80 kg (176 lbs).

Multi-Day Treks around Conguillío National Park

Conguillío National Park is on the east side of Llaima volcano. Travel there from the town of Vilcún. First get to the eroded pyroclastic cone that is Split Hill west of Llaima, part of a chain of cones along a fissure running northeast. In the park itself, there is a solid lava flow 4.5 m high, partly eroded and looking like a cascade. Twins Hill is made of ancient lavas from Llaima, and it has a good view of El Seco estuary valley. Japanese Hill is another result of lava flows, and it has a tree line. Again on the west side of Llaima is Rio Calbuco and the Calbuco Waterfalls. There is great flow during the Spring. Erosion has exposed a wall of ancient lavas from the Upper Pleistocene age.

Just Wildlife Please

There is only one road to Parque Nacional Huerquehue, via Pucón to Caburgua and a detour to Paillaco. This park is 135 km from Temuco. This park of great varying elevations is known for its flora and fauna. Within the forests of araucaria, lenga, coihue and mañío, you might see condors, black woodpeckers, hued-hued, and others. There are many lizards of the genus Liolaemus, Darwin's frog and the four-eyed toad, plus mammals like the pudú, foxes, coypo, chingue, puma and monito del monte (opossum).

La Peregrina pearl

At the time of its discovery, “La Peregrina” was the largest pearl ever found. This incredible pear-shaped pearl, weighing a hefty 50.56 carats or 10.1 grams, was found off the coast of Panama in 1576, by an African slave in the Pearl Islands in 1513. It was turned over to the local administrator of Panama at the time.

Then the pearl was bought by Philip II of Spain for his bride Queen Mary I of England. It passed down among Spanish royalty as part of a pendant, appearing in paintings of famous women over the next two centuries.

When Joseph Bonaparte became king of Spain in 1808, and then was forced out five years later, he kept some of the crown jewels including this pearl that had acquired the name "La Peregrina", the Wanderer or the Pilgrim. Again, it got passed around to various members of the British aristocracy. Because of its weight, the pearl sometimes fell out of its setting, so it was misplaced between couch cushions several times.

In 1969, it was put up for auction and bought for \$37,000 by Richard Burton for Elizabeth Taylor. It was remounted on a necklace designed by Cartier.

In 2011, La Peregrina was put up for auction as part of Elizabeth Taylor’s estate. It was expected to sell for \$3 million, but instead it sold for over \$11 million (after critical administrative fees were added). It was the most expensive natural pearl auctioned at the time.



Inset of Juan Pantoja de la Cruz, Margaret of Austria, Queen of Spain wearing the pearl (c. 1606); Juan Pantoja de la Cruz - Royal Collection of queen Elizabeth II

https://en.wikipedia.org/wiki/La_Peregrina_pearl

NIPISSING ROCK & MINERAL CLUB

4th Annual Sale & Auction

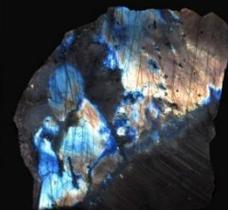
Rocks, minerals, fossils, jewelry,
& activities for kids.

Saturday April 18, 2026

SALE: 9:00 to 5:30 pm

Auction 4:00 pm

Callander Community Centre
1984 Swale St, Callander, ON


Free Admission



Ottawa Lapsmith & Mineral Club's
**58th Annual Gem,
 Mineral & Jewellery
 Show & Sale**

**58e Salon annuel
 des pierres,
 minéraux et bijoux**

September 19-20, 2026

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Workshop Schedule						
April 2026						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Lapidary 5-9 pm (JL)	2 Faceting 6pm-9pm (DA)	3	4 Lapidary 10 am-4 pm (EC, JM)
5 	6	7 Lapidary 10am-2pm (RV) Silversmith 6:30-9pm (JB)	8 Lapidary 5-9 pm (CG)	9 Faceting 6pm-9pm (JL)	10	11 Lapidary 10 am-4 pm (CG, KD)
12	13	14 Lapidary 10am-2pm (RV) Silversmith 6:30-9pm (DA)	15 Lapidary 5-9 pm (DP)	16 Faceting 6pm-9pm (DA)	17	18 Lapidary 10 am-4 pm (SJ, JC)
19	20	21 Lapidary 10am-2pm (RV) Silversmith 6:30-9pm (JB)	22 Lapidary 5-9 pm (CG)	23 Faceting 6pm-9pm (JL)	24	25 Lapidary 10 am-4 pm (DF, NB)
26	27	28 Lapidary 10am-2pm (RV) Silversmith 6:30-9pm (DA)	29 Lapidary 5-9 pm (JL)	30 Faceting 6pm-9pm (RB)		



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 <https://olmc.ca>
You can also go on our Facebook page: [OttawaLapsmithMineralClub](#)*

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 with the application form

Please mail your membership form and fees to:

Ottawa Lapsmith and Mineral Club
PO Box 57012, Ottawa RPO Gladstone, Ottawa, ON, K1R 1A1

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

Administration use only

Card provided: Yes No

Supervisor signed: Yes No

Date: _____