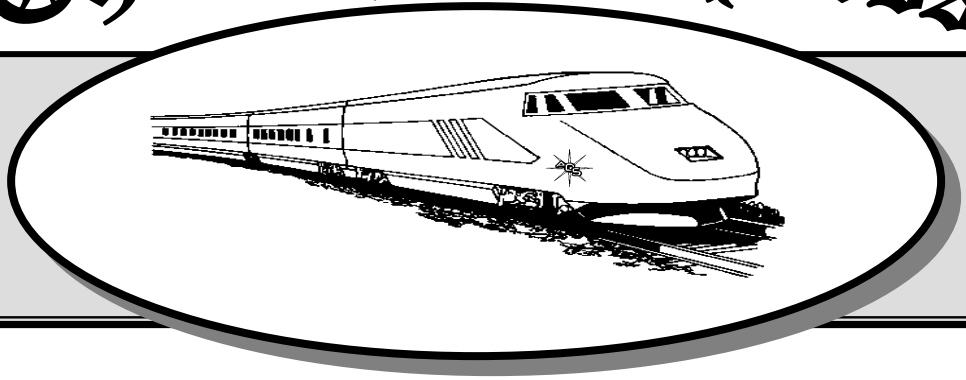
The Opal Express



Published monthly by The American Opal Society

April 2014

Volume 47 Issue 4

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Members Only Website Password

AOS website's members only area: Name: "member" and Password: "opalbug".

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Last Month's Speaker: Welo Opals by Gabriel Mosesson

At the last March General Meeting, Gabriel Mosesson gave a great presentation about Welo Opal. Gabriel is the owner of Ethiopia Imports, a long standing member and Opal Show dealer. Gabriel cuts opal and designs his own opal jewelry and sells them on his website, www.ethiopiaimports.com. Gabriel is from Ethiopia, where he maintains close contacts to continue his supply of rough opal.

First, Gabriel differentiated the Welo opal from the older chocolate brown opal nodules from the Shoa Region. Welo opal is stable, where the brown opal "geode" type opal was unstable and crazed easily. Welo opal was discovered in 2007 in the steep canyon tributaries of the Blue Nile River. Here the opal is mined under dangerous conditions because the opal is on the side of cliffs thousands of feet high. Many of the local farmers have become opal miners and quite a large volume of rough opal has come from the mines. Since the discovery the Ethiopian government has attempted to regulate the mining and selling of the opal for various reasons and has somewhat curtailed the availability of the rough for export. Gabriel has weathered this difficulty and has maintained his supply.

A brilliant Welo Opal with Pyramid Hologram Fire

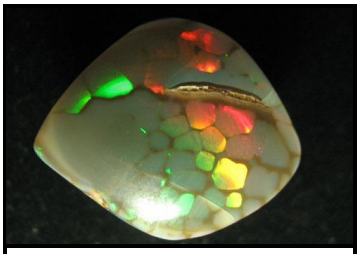
Opal with Root Inclusions

Since 2007, Welo opal has stormed the opal jewelry business. The opal has become extremely popular due to its extreme color brightness and variety of colors. Most of the Welo opal is of the crystal variety, with many being clear or translucent. The opal comes in a variety of base colors - white, yellow, orange, brown, red, green, blue, purple, gray and black. The opal has also been found to have a higher percentage of rare patterns. Some of these patterns are pin fire, harlequin pattern, honeycomb, linear fire patterns, sheets of fire in layers, broad flash, ribbon fire, etc. Gabriel described a new pattern called pyramid fire unique to Welo opal. This pattern is very rare and highly desirable. The fire appears as narrow pyramids of fire, where the fire changes colors in the pyramid. The more colors the better and they always come in the order of red, yellow, green blue, and purple.

Gabriel believes that Welo opal is wood replacement opal, similar to Virgin Valley opal. He said that similar geological environment exists where wood was buried in a volcanic ash layer where the wood, over millions of year, was replaced as opal with the dissolved silica from the ash. He showed a number of fossils that were limb casts or had a wood pattern on them; also, and some opal had root inclusions.

Gabriel then discussed cutting Welo opal, which he is quite experienced in. Most Welo opal is hydrophane. This means it has the ability to absorb water. When Welo opal absorbs water, the opal turns clear with the color disappearing. The color returns when the opal dries, which may take a few hours to a few days, depending on the humidity and opal. When drying, the opal appears milky at first, then eventually clears, revealing the color.

Gabriel Mosesson



Black Harlequin Welo Opal

When cutting Welo opal, care must be taken to keep the opal cool, so most cutting is done wet. Care must be taken to remember where the color orientation is because the opal will turn clear when cutting. Some cutters cut their opal dry as to not lose the color. This is not recommended because extreme care must be take here as to not breath in the silica dust from the cutting, which cause the deadly disease of silicosis.

Most Welo is made into cabochons, but a number of Welo opals are faceted due to their high transparency with excellent results. Also, more cutters are hand carving their Welo rough with flexible shaft tools or sandpaper to optimize the weight and to give more natural shapes. Also, when cutting Welo, check to see if it is contra luz.

The opal location has been spelled a number of ways – Welo, Wello, Wollo. All are accepted, with Welo being the most prevalent. The AOS wants to thank Gabriel for giving an excellent presentation, which included a colorful slide show, display of many unusual rare opals, and offering rough and finished opal for sale, which our members gladly partook in.

Opal is mined all along the first horizontal line in the cliff. The top of the cliff is 10900 feet high.

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A Trip to the Royal Peacock Mine in the Virgin Valley

Feb. 11, 2007

The opals were dug at the Royal Peacock Mine in the Virgin Valley. The vacation was planned after watching a show on the Travel Channel about where to find treasure in America. We didn't pump ourselves up about really finding anything. It just looked like fun. I'm not the kind of person to want to go lay at a beach all day sipping fruity drinks, borrrring. Luckily my husband feels the same way. Plan on camping out at the campgrounds right there in the Valley, or plan on at least a 45 minute drive each day if you can get a room at the Denio Junction Hotel. There isn't much else in the way of accommodations way out there. The Royal Peacock does have their own camp sites and they also have 3 furnished campers for rent (hint, call early, they go quickly!).

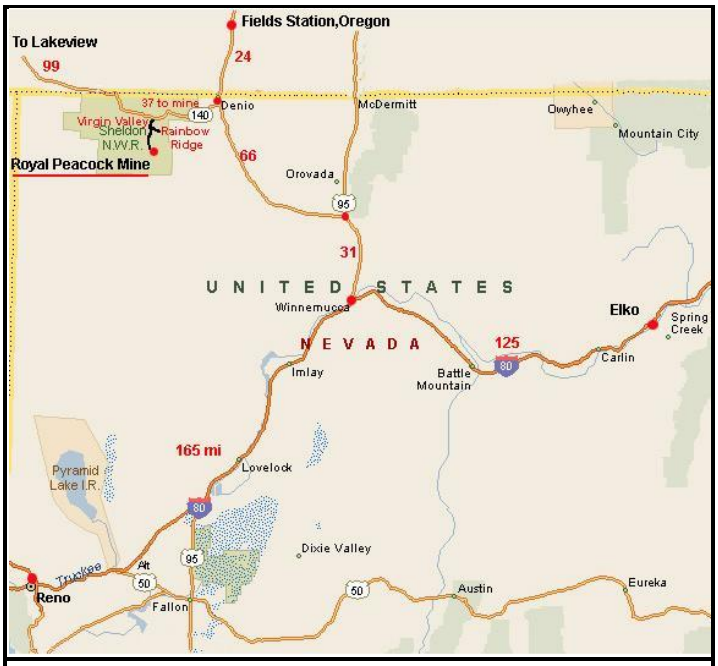
Our first day of digging proved us right in not expecting to hit an opal, except towards the very end of the day. I found a piece of potch that had some non-precious opal with it. That whetted the appetite. We moved to a different part of the bank the next morning

Virgin Valley

Virgin Valley showing opal bearing strata

and it wasn't too long before we hit a 'hot spot'. We staked our 5 feet (per person) on the bank and dug the same area for 4 more days. I consider us lucky as 85% or better of the people who came to dig did not find anything. They also were only digging for just one day. It takes a lot of hard work and moving a lot of dirt in hot windy weather

Some Virgin Valley Residents



Virgin Valley Location

(in August, anyway). It is a hit or miss situation. You could be just inches away from finding an opal, or feet away. We didn't really get a chance to speak with Harry Wilson, one co-owner of the mine. He had a friend who was the guide to the dig and he had some good advice, don't come expecting to leave paying for your vacation, those are the people who won't find anything. We didn't and had some terrific luck.

Believe me, there is nothing I've ever felt like the feeling that came over me with my first sight of opal flash from that clay bank. If you do take the chance and head out for some digging do a web search on Virgin Valley opal and visit some of the mine web sites. They all have good advice on what to bring for supplies. And even if you don't find anything the scenery alone is worth a look.

Happy Hounding!

Sheryl

From http://rockhoundblog.com

Virgin Valley Precious Black Opal

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Gold-bearing Tellurides

As appearing in *The Gold Nugget*, September 1999

By Harvey S. Eastman, August 29, 1999

Gold-bearing tellurides loom large in the history of gold mining in Colorado. These mineral species are found in the San Juan Mountains, the La Plata Mountains, and at Cripple Creek. Other major localities in the United States include the huge gold fields of the Sierra Nevada foothills in California.

Gold-bearing tellurides are silvery to pyrite-yellow minerals, commonly striated, unlike gold which is a deeper yellow and rarely crystalline; and many of the lodes carrying gold-bearing tellurides were not discovered until the late 1800's. Placer gold was often found below the Cripple Creek Mine, but the lodes of the area were not recognized until the 1890's. Similar histories are common in other areas where gold-bearing tellurides were the major ore mineralogy. The miners of the 1860's would find gold placers below these vein deposits. However, the veins themselves were not recognized for what they were until some miner, perhaps cooking a meal on a camp fire surrounded by rocks, noticed gold appearing where a silvery, or pyrite-like mineral had been before.

This discovery led to a second gold rush to find these veins with a silvery to pyrite-like mineral, testing them with fire to determine if that mineral contained gold. Out of this rush came the mining camps of Cripple Creek and Telluride along with other mining camps in the San Juan region of Colorado. Of these, the mining camp of Cripple Creek is the most famous, producing nearly 20 million ounces of gold over a 70 year period from 1891 to 1961 (Smith, Raines, and Feitz, 1985). Additional gold was produced in the 1980's from heap leaching of low-grade gold-bearing mine tailings and 'waste' dumps.

A tip on finding tellurides: The mineral commonly has a greenish halo around it when weathered, due to oxidation of the telluride.

Gold-Bearing Telluride Mineralogy

Gold-bearing tellurides are common in gold-bearing deposits throughout the world. The following mineral species are the more common varieties. Localities listed are restricted primarily to the United States except when the mineral is not known to occur in this country.

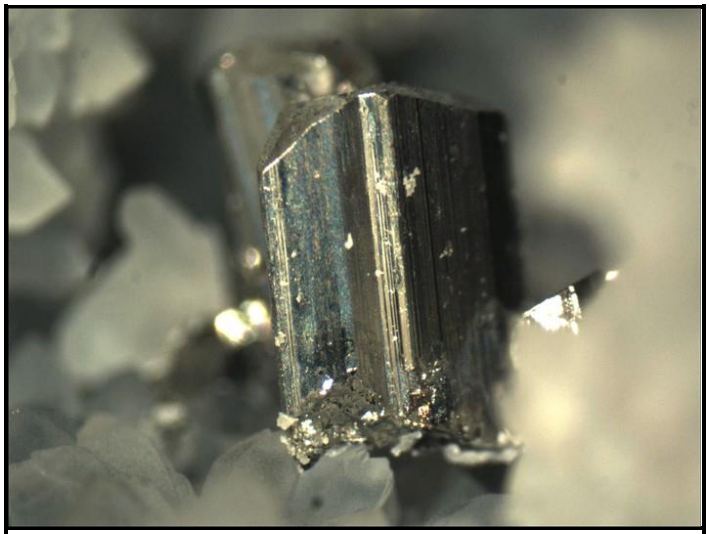
Petzite: Ag3AuTe2 (silver-gold telluride)
Steel gray to black, metallic.
Gold Hill and Sunshine Mines in Colorado and various mines in Calaveras and Tuolumne Counties in California.

Krennerite: (Au,Ag)Te2 (gold-silver telluride)
Silver-white to pale yellowish white, metallic, good cleavage.
Cripple Creek District, Teller County, Colorado.

Sylvanite: AgAuTe4 (silver-gold telluride)
Silver white, sometimes a yellow tint, metallic. Good cleavage, brittle.
Foothills gold belt, California; Cripple Creek District and other areas, Colorado

Calaverite: AuTe2 (gold telluride)
Brass yellow to silver white, metallic, brittle.
Looks like pyrite, but when roasted, gold appears.
Foothills gold belt, California; La Plata, Montezuma, Boulder, Hinsdale, and Teller Counties, Colorado, including the Cripple Creek District.

Montbrayite: (Au,Sb)2Te3 to Au2Te3 (gold + antimony telluride)
Tin-white to pale yellow, metallic. Brittle.
Robb-Montbray mine in Abitibi County, Quebec, Canada.



Calaverite

Nagyagite: Pb5Au(Te,Sb)4S5-8 (lead-gold tellurium sulfosalt)
Dark lead-gray, good cleavage with flexible laminae, metallic.
Gold Hill in Boulder County, Colorado; Trinity, Calaveras, and Shasta Counties, California; Kings Mountain Mine, Gaston County, North Carolina.

Kostovite: AuCuTe4 (gold-copper telluride)
Grayish white, metallic.
Chelopech, Bulgaria

Other telluride species are known to exist, including combinations with lead, iron, sulfur, and selenium. For more information refer to Wilson (1982) and other authors on tellurides.

References

- Lindgren, W. and Ransome, F. L. 1906. Geology and Gold deposits of the Cripple Creek District, Colorado, USGS Professional Paper 54.
- Ramdohr, P. 1969. The Ore Minerals and their Intergrowths, Pergammon Press, London.
- Roberts, W. L., Rapp, G. R., and Weber, J. 1974. Encyclopedia of Minerals, Van Nostrand Reinhold Company, New York.
- Smith, A. E. Jr., Raines, E., and Feitz, L. 1985. The Cresson Vug, Cripple Creek, The Mineralogical Record, vol. 16, no. 3, pp. 230 - 238.
- Wilson, W. E. 1982. The Gold-Containing Minerals: a Review, The Mineralogical Record, vol. 13, no. 6, pp. 389 - 400.

Dr. Eastman, who has a PhD in geology from Stanford University, has fifteen years experience in mining copper, uranium, silver, and gold, and most recently, eight years experience in groundwater resources and environmental consulting. He currently is a Project Manager in hydrogeology with Jehn Water Consultants, Inc. and Jehn Environmental, Inc., Denver, Colorado.
From http://www.lornet.com

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Louisiana Man Unearths 2.89 Carat White Diamond at Arkansas State Park

Brandon Kalenda

March 12, 2014, FoxNews.com

A Louisiana man has found a 2.89 carat white diamond at Arkansas' Crater of Diamonds State Park in Murfreesboro.

Park officials said Tuesday that Brandon Kalenda of Maurepas, Louisiana, found the diamond on March 6 and said he plans to keep it. Kalenda named the diamond "Jax Diamond" after his infant son Jackson. Park Interpreter Margi Jenks said the diamond is the 47th to be registered by park visitors this year and is the fourth weighing more than a carat to be found since mid-February.

2.89 Carat Diamond vs. Quarter

"Sure enough, Brandon found his diamond after searching for about 20 minutes in the Fugitt's Bank area of the park's search area," Jenks said. "We encourage park visitors to look for pockets or layers on the surface of gravel, and search there."

Jenks said Kalenda's diamond is triangular-shaped with a metallic appearance and is about the size of an English pea. "No two diamonds in the rough are alike," Jenks added.

Kalenda's family decided to visit the park after a relative watched a segment of TLC's "19 Kids and Counting," where the Duggar family visited the Crater of Diamonds State Park.

2.89 Carat Diamond

Jenks said conditions are "perfect" for diamond hunting at the park, noting recent rainfall and the fact that staff plowed the diamond search field at the end of January."Diamonds are a bit heavy for their size, and they lack static electricity, so rainfall slides the dirt off diamonds that are on the surface of the search field leaving them exposed," she said. "When the sun comes out, they'll shine and be noticeable."

The Associated Press contributed to this report.

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Bumblebee Agate / Jasper

This material from Indonesia is becoming quite popular. It is sold as Bumblebee Agate or Bumblebee Jasper. Analysis online at a gemmological web site quotes the miners in correspondence with a contributor. It is mined from sulphur vents. Their speculation on probable composition and viewing with a microscope shows the following: The material is anhydrite (gypsum), sulphur, hematite, in a matrix of volcanic tuff (welded ash). It also may have plumose calcite and ilmenite. While the miners claim they can call it agate because it could have some opaline silica, conclusions indicate the silica content is negligible so certainly does not qualify as an agate. The material is the most expensive anhy-dritesulphur you can buy at a dollar a gram, it can decompose and make sulphuric acid which will rot your jewelry mounting, and is softer than even travertine making it useless for jewelry. It is all about marketing. Essentially the material is decomposed volcanic ash, which is another name for siliceous mud with sulphur, yet the material is dominated by anhydrite. If it was mostly mud, we would call it Biggs Jasper and charge even more for it. Keep in mind agate forms at a pH greater than 6.5, typically around 8.5 in alkaline conditions, and sulphur forms in extremely acidic conditions of pH 4 or less, so there is no significant silica that can be deposited in these vent conditions. In fact, it would take microscopy to find any silica.

Submitted by Bob Rush Lapidary/Gemstone Community in The Rockhound 08/12, Via Morocks 04/14

Bumblebee Jasper

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Spinel

By Minda Moe
Culver City Rock & Mineral Club

The first synthetic spinel was produced in 1847, by a French Chemist named Jacques-Joseph Ebelmen. Synthetic spinel did not come into style until the 1930s, when it was used to imitate gemstones such as aquamarine, zircon, emerald, chrysoberyl, ruby, and tourmaline Spinel is a metamorphic oxide mineral, and is often a primary mineral in igneous rocks. It comes in many colors, such as red, blue, dark green, brown, and black. Its streak is grayish white. Red, pink, and violent spinel will often fluoresce either red or neon-yellow when placed under ultraviolet light. On the Mohs scale, it ranks at 7.5, meaning that it is slightly harder than quartz but slightly softer than topaz. Its specific gravity is 3.5 g/cm3.

Crystal Spinel

Spinel is mostly only valued for its use as a gemstone. Due to its rarity and the fact that it cannot be consistently mined, jewelry companies have steered away from promoting it as a high-end product.

Burma and Sri Lanka are the main producers of gem-quality spinel, though spinel was originally produced out of Afghanistan. In the United States, the finest spinel crystals are found in a region in New Jersey and New York. Fine crystals have also been found in Massachusetts and Montana. In the past, red spinels were confused with ruby and were often called balas rubies, or spinel-rubies. Rubies and spinel can often be found together, but rubies are much rarer, and the two can be distinguished by differences in hardness and composition. Because of this, the most famous spinels are still named as if they are rubies. Some of the most famous gemstones in the world are actually spinel. In the British Crown Jewels, the Timur ruby and the Black Prince's ruby are, in fact, spinel gems. The largest spinel in the world, the Samarian spinel, is in the Iranian Crown Jewels. The second largest known spinel, Catherine the Great's Ruby, is featured on Russia's Great Imperial Crown, where it was set for Catherine the Great's 1762 coronation.

Faceted Spinel

From the Nugget – 2014-04

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Crystal Spinel in Matrix

Oscar Jewelry!

Best Looks from the 2014 Academy Awards

By Erika Winters, 04 Mar 2014

***Cate Blanchett** with opal and diamond earrings*

*Oscar winner **Cate Blanchett** (Blue Jasmine) stunned on the red carpet in opal and diamond earrings from Chopard. Perfection!*

***Angelina Jolie** - No one wears a pair of simple (and huge) earrings like Angelina Jolie. Her 42-carat diamond drops from Robert Procop are exactly why we love her on the red carpet.*

While there were many gorgeous looks at the 2014 Oscars, we adored the amazing statement jewels worn by Cate Blanchett, Naomi Watts, Charlize Theron, and other luminaries. We were ready for bold looks following the tamer ensembles from the 2014 Golden Globes, and we were not disappointed.

***Charlize Theron** -Jaws dropped when Charlize Theron stepped out on the red carpet wearing a $15 million diamond necklace from Harry Winston. Now this is Oscar jewelry.*

Diamonds: They simply dominated the red carpet. And some took our breath away! Charlize Theron wore a $15 million diamond drop necklace from Harry Winston that made our hearts skip a beat. And Angelina Jolie's 42-carat diamond earrings from Robert Procop were so stunning that we *almost* forgot her emeralds drops from 2009--but not quite. (Who are we kidding? The emeralds were everything.) Naomi Watts shined in a web-like Bulgari diamond necklace. And Jessica Biel glittered in an array of Tiffany jewels, including a gorgeous aquamarine and diamond bracelet...which leads us to color, or the lack thereof...

Color: While bold, bright color was conspicuously absent from the main looks on the red carpet, Oscar-winner Cate Blanchett stole the show in an *amazing* pair of opal and diamond earrings from Chopard. And Biel's hints of Tiffany blue were duly noted.

Gold: She took home the golden statuette, and Oscar-winner Lupita Nyong'o stole our hearts, as she floated on a cloud of blue by

Prada with gold jewels by Fred Leighton. Her unique crescent-shaped earrings and headband lit up her face while a gorgeous gold serpent wound its way around her wrist. She wore vintage turquoise and opal rings that were perfect with her gown.

There were many looks to love! Check out our favorites from the 86th annual Academy Awards.

From http://www.pricescope.com

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Diamond No Longer Nature's Hardest Material

By Jessica Griggs, February 2009

Diamond will always be a girl's best friend, but it may soon lose favour with industrial drillers.

The gemstone lost its title of the "world's hardest material" to man-made nanomaterials some time ago. Now a rare natural substance looks likely to leave them all far behind – at 58% harder than diamond.

Zicheng Pan at Shanghai Jiao Tong University and colleagues simulated how atoms in two substances believed to have promise as very hard materials would respond to the stress of a finely tipped probe pushing down on them.

Extreme conditions

The first, wurtzite boron nitride has a similar structure to diamond, but is made up of different atoms.

The second, the mineral lonsdaleite, or hexagonal diamond is made from carbon atoms just like diamond, but they are arranged in a different shape.

Only small amounts of wurtzite boron nitride and lonsdaleite exist naturally or have been made in the lab so until now no one had realised their superior strength. The simulation showed that wurtzide boron nitride would withstand 18% more stress than diamond, and lonsdaleite 58% more. If the results are confirmed with physical experiments, both materials would be far harder than any substance ever measured.

Doing those tests won't be easy, though. Because both are rare in nature, a way is needed to make enough of either of them to test the prediction.

Rare mineral lonsdaleite is sometimes formed when meteorites containing graphite hit Earth, while wurtzite boron nitride is formed during volcanic eruptions that produce very high temperatures and pressures.

Flexible friend

If confirmed, however, wurtzite boron nitride may turn out most useful of the two, because it is stable in oxygen at higher temperatures than diamond. This makes it ideal to place on the tips of cutting and drilling tools operating at high temperatures, or as corrosion resistant films c on the surface of a space vehicle, for example.

Paradoxically, wurtzite boron nitride's hardness appears to come from the flexibility of the bonds between the atoms that make it up. When the material is stressed some bonds re-orientate themselves by about 90º to relieve the tension.

Although diamond undergoes a similar process, something about the structure of wurtzite boron nitride makes it nearly 80% stronger after the process takes place, says study co-author Changfeng Chen at the University of Nevada, Las Vegas, an ability diamond does not have.

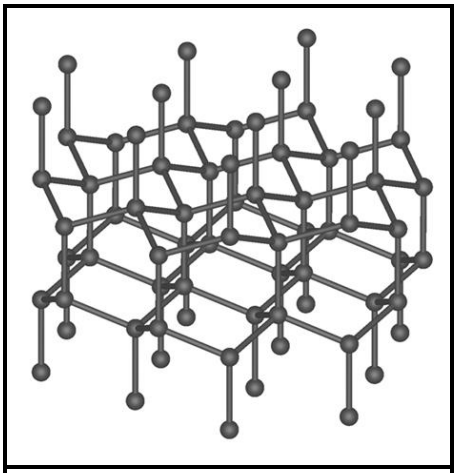
Single crystals

Natalia Dubrovinskaia from the University of Heidelberg in Germany, has carried out similar research.

"This is important because any attempt to give an insight into the mechanism that improves a material's property, especially hardness, is technologically extremely significant," she told **New Scientist**.

The more that is understood about what influences the hardness of materials, the more it will become possible to design hard materials to order, she explains.

However, she points out that in order to prove the theory, single crystals of each material would be needed. So far there are no known ways to isolate or grow such crystals of either material.



Lonsdaleite crystal structure

Journal reference:
Physical Review Letters (DOI: 10.1103/PhysRevLett.102.055503)
From http://www.newscientist.com

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April 2014 Gem & Mineral Shows

More shows can be found at http://www.rockngem.com/show-dates-display/?ShowState=ALL

4-6—TACOMA, WA: Wholesale and retail show; Gem Faire Inc.; Tacoma Dome; 2727 E. D St.; Fri. 12-6, Sat. 10-6, Sun. 10-5; weekend pass $7, children (0-11) free; fine jewelry, gems, beads, crystals, silver, rocks, minerals, exhibitors, jewelry repair while you shop, hourly door prizes; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

5-6—CENTRAL POINT, OR: Annual show; Roxy Ann Gem & Mineral; Olsrud Arena; Jackson County Fairgrounds; Sat. 9-5:30, Sun. 10-4:30; adults $4, seniors and students $2, children (under 6) free; "Amazing Gems": exhibits, dealers, demonstrations, gold panning, silent auction, children's activities, door prizes; contact Jami Walkins, Crater Rock Museum, 2002 Scenic Ave., Central Point, OR 97502, (541) 664-6081; e-mail: roxyanngems@msn.com; Web site: www.craterrock.com

5-6—POCATELLO, ID: 58th Annual Gem and Mineral Show; South East ID Gem & Mineral Society; Bannock County Fairgrounds; 10558 Ifft Rd.; Sat. 10-6, Sun. 10-5; adults $2, children (12 and under) free; contact Anna Capell, 12540 S. Robin Rd., Arimo, ID 83214, (208) 221-9458; e-mail: gazecape62@hotmail.com

10-12—WY, MI: Annual show; Indian Mounds Rock & Mineral Club; Rogers Plaza Town Center; 972 28th St. SW; Thu. 9:30-9, Fri. 9:30-9, Sat. 9:30-8; free admission; dealers, minerals, fossils, gems, jewelry, beads, rough, equipment, books, displays, demonstrations, children's table; contact Don Van Dyke, 4296 Oakview, Hudsonville, MI 49426, (616) 669-6932; e-mail: donvandyke@tm.net; Web site: www.indianmoundsrockclub.com

11-13—EUREKA, CA: Annual show; Crafty Cat Events; Redwood Acres Fairgrounds; 7250 Harris St.; Fri. 12-6, Sat. 10-6, Sun. 10-5; adults $3, seniors and students $2, children (12 and under) free; contact Johnita Wemken, CA, (916) 212-1647; e-mail: info@craftycatevents.com; Web site: www.craftycatevents.com

11-13—PORTLAND, OR: 57th Rock, Mineral & Gem Show; Mt. Hood Rock Club; National Guard Armory; 10000 NE 33rd Dr., off Marine Dr.; Fri. 10-5, Sat. 10-5, Sun. 10-4; free admission; contact L.F. Smith, 15523 NE 215th Ave., Brush Prairie, WA 98606; e-mail: mhrcshow@gmail.com

11-13—VISTA, CA: San Diego County Rock and Gem Tailgate and Meetup; Vista Gem & Mineral Club; Vista Antique Gas and Steam Engine Museum; 2040 N. Santa Fe Ave.; Fri. 10-5, Sat. 10-5, Sun. 10-4; free admission; dealers, rough, slabs, cabochons, gems, finished jewelry, raffle, speakers; contact Aleta Dirdo, 836 Hampton Ct., Vista, CA 92081, (760) 726-4486; e-mail: ajdirdo@gmail.com; Web site: www.vistarocks.org

12-13—ANTHEM, AZ: Annual show; Daisy Mountain Rock & Mineral Club; Anthem School; 41020 N. Freedom Way; Sat. 10-5, Sun. 10-4; adults $3, seniors and students $2, children free; gems, minerals, fossils, fluorescence, jewelry, beads, wire wrapping, geodes, raffles, kids' events; contact Ed Winbourne, 1717 W. Medinah Court, Anthem, AZ 85086, (978) 460-1528; e-mail: ewinbourne@gmail.com

12-13—PARADISE, CA: Annual show; Paradise Gem & Mineral Club; Elks Lodge; 6309 Clark Rd.; Sat. 10-5, Sun. 10-4; adults $2, students and children free; contact Manuel Garcia, 5659 Foster Rd., Paradise, CA 95969; Web site: paradisegem.org

12-13—SAN JOSE, CA: 58th Annual Show; Santa Clara Valley Gem & Mineral Society; Santa Clara County Fairgrounds; 344 Tully Rd.; Sat. 10-5,

American Opal Society Calendar

Date	General Meeting Topic / Speaker
01/09/14	Gregg Bunch on Lab Created Quartz Crystals
02/13/14	Video of "Gem Hunt" on Welo Opal
03/13/14	Gabriel Mosesson on Ethiopian Welo Opal
04/10/14	***Jim Pisani on an Introduction to Metal Detection***
05/08/14	*To Be Announced*
06/12/14	**Live Opal Auction**
07/10/14	*To Be Announced*
08/14/14	**Opal Cutting Seminar**
09/11/14	*To Be Announced*
10/09/14	**Opal & Gem Show Work Session**
11/08/14	**47th Annual Opal, Gem, & Jewelry Show**
11/09/14	**47th Annual Opal, Gem, & Jewelry Show**
11/13/14	**Opal Show Recap / Possible Speaker**
12/11/14	**AOS Christmas Party Potluck**

Sun. 10-5; adults $6 ($1 off coupon on Web site), children (under 12) free; kids' area, gold panning, flintknapping, demonstrations, displays, fluorescent mineral display, 50 dealers, scholarship booth, special programs, door prizes; contact Frank Mullaney, (408) 265-1422; e-mail: info@scvgms.org; Web site: www.scvgms.org

12-13—YAKIMA, WA: Annual show; Yakima Rock & Mineral Club; WA National Guard Amory; 2501 Airport Ln.; Sat. 10-6, Sun. 10-4; adults $3.50, students $2, children (12 and under) free with adult; dealers, demonstrations, food, gold panning, silent auction, Junior activities, grab bags, door prizes, raffle, spin a wheel; contact Marti Sondgeroth, 2013 S. 41st Ave., Yakima, WA 98903, (509) 248-6401 evenings; e-mail: Marthams@q.com18-20—EUGENE, OR: Wholesale and retail show; Gem Faire Inc.; Lane County Events Center; 796 W. 13th Ave.; Fri. 12-6, Sat. 10-6, Sun. 10-5; weekend pass $7, children (0-11) free; fine jewelry, gems, beads, crystals, silver, rocks, minerals, exhibitors, hourly door prizes; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

19-20—MARIPOSA, CA: Show and sale; CA Mineral & Mining Museum, Mariposa Gem Club; Mariposa Fairgrounds; 5005 Fairgrounds Rd.; Sat. 10-6, Sun. 11-5; adults $3; contact Martin Foden, 5008 Highway 140, Suite A-295, Mariposa, CA 95338, (209) 742-4036; e-mail: martin@safarigold.com; Web site: www.camineralmuseum.com

25-27—GRANTS PASS, OR: Annual show; Rogue Gem & Geology Club; Josephine County Fairgrounds; 1451 Fairgrounds Rd.; Fri. 9-5, Sat. 9-5, Sun. 9-4; adults $1 (free on Fri.), children (11 and under) free; 17 dealers, 10 demonstrators, silent auction, door prizes, displays, kids' games; contact Linda Pullen, 185 Buttercup St., Grants Pass, OR 97527, (541) 476-1712; e-mail: neenapullen@msn.com

25-27—SAN DIEGO, CA: Wholesale and retail show; Gem Faire Inc.; Scottish Rite Center; 1895 Camino del Rio S; Fri. 12-6, Sat. 10-6, Sun. 10-5; weekend pass $7, children (0-11) free; fine jewelry, gems, beads, crystals, silver, rocks, minerals, exhibitors, hourly door prizes; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

25-27—WICHITA, KS: Annual show; Wichita Gem & Mineral Society; Cessna Activity Center; 2744 George WA Blvd.; Fri. 9-7, Sat. 10-7, Sun. 10-5; adults $5, students (12-17) $1, children free with parents; contact Gene Maggard, 8318 S.E. Hwy. 77, Leon, KS 67074, (316) 742-3746; e-mail: gandpmaggard@gmail.com

26-27—SANTA CRUZ, CA: Annual show; Santa Cruz Mineral & Gem Society; Santa Cruz Civic Auditorium; corner of Church St. and Center St.; Daily 10-5; adults $5, children (under 12) free; fluorescent room, Treasure Wheel, exhibits, lectures, gold panning, dealers, minerals, fossils, gemstones, jewelry, tools, guidebooks, display specimens, kids' activities; contact Dean Welder, (408) 353-2675; Web site: www.scmgs.org

26-27—SEATTLE, WA: Annual show; West Seattle Rock Club; Alki Masonic Temple; 4736 40th Ave. SW; Sat. 10-5, Sun. 10-5; free admission; contact Lyle Vogelpohl, PO Box 16145, Seattle, WA 98116, (206) 932-3292; Web site: www.westseattlerockclub.org

26-27—THOUSAND OAKS, CA: 40th Annual Show; Conejo Gem & Mineral Club; Borchard Park Community Center; 190 Reino Rd., corner of Borchard Rd. and Reino Rd.; Sat. 10-5, Sun. 10-5; free admission; "Pageant of a Thousand Gems": exhibits, sales, gems, jewelry, rocks, minerals, fossils, special youth activities, lapidary and jewelry-making demonstrations, silent auction, door prizes; contact Robert Sankovich, 1961 Havenwood Dr., Thousand Oaks, CA 91362, (805) 494-7734; e-mail: rmsorca@adelphia.net; Web site: www.cgamc.org

American Opal Society Membership Application

FILL IN APPLICABLE INFORMATION		DUES / FEES)	AMOUNT PAID
DUES: SELECT ONE	RENEWING MEMBERS	$30	
	NEW MEMBERS	$40	
INTERNATIONAL MEMBERSHIP FEE (All addresses outside of USA)		$10	
PRINTED NEWSLETTER FEE (Paper copy postal mailed instead of PDF file by e-mail)		$5	
ADDITIONAL BADGES (Your First Badge is free when joining)		$10	
TOTAL PAID DUES plus International, Print or Badge Fees if Applicable:			

Please make check or money order payable to "*American Opal Society*". Mail payment and application to:
American Opal Society; PO BOX 4875; Garden Grove, CA 92842-4875
An optional, quicker method of payment is via the Internet. To pay, just visit the membership page on our website at http://opalsociety.org/aos_application_by_web.htm and complete the form. You may pay with a Credit Card or via PayPal account. The transaction is completely secure and the AOS never sees your credit card number. The AOS PayPal account is membership@opalsociety.org.

NAME		
BUSINESS NAME		
ADDRESS		APT # or PO BOX
CITY		STATE
ZIP or POSTAL CODE	COUNTRY (IF OUTSIDE USA)	
PHONE - Home ( )	PHONE - Business ( )	FAX ( )
E-MAIL		
WEBSITE		
OCCUPATION	HOBBIES AND INTERESTS	

NAME BADGE ORDER FORM: PLEASE PRINT NAME AS YOU WISH IT TO APPEAR ON YOUR BADGE using up to two (2) lines of text for your name, nickname, or name of your opal related business.

MEMBERSHIP ROSTER: The AOS publishes a membership directory once per year in its Newsletter, the *Opal Express*. Your name will be included. Please check what additional personal information that you want listed for other members. If it is different from the information above, please note that on the application.

☐ Address ☐ Phone ☐ E-mail ☐ Website

Please sign here: _____ Date _____

The Opal Express is published monthly by
The American Opal Society.

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Are Your Dues Due Now?

PLEASE CHECK YOUR ADDRESS LABEL or NEWSLETTER E-MAIL. There should be a date that shows the current month/year of your membership. If the date is older than the current date, your dues are overdue. A warning will be stated if you are overdue.
A Renewal Grace Period of two months will be provided. Please note, however, that as the system is now set up, if your renewal is not received you will be AUTOMATICALLY dropped from membership thereafter. It is your responsibility to assure your dues are current.
Thank you,

The Editor

The Opal Express
American Opal Society
P.O. Box 4875
Garden Grove, CA 92842-4875

Volume #47 Issue #4
April 2014

TO:

Some Topics In This Issue:

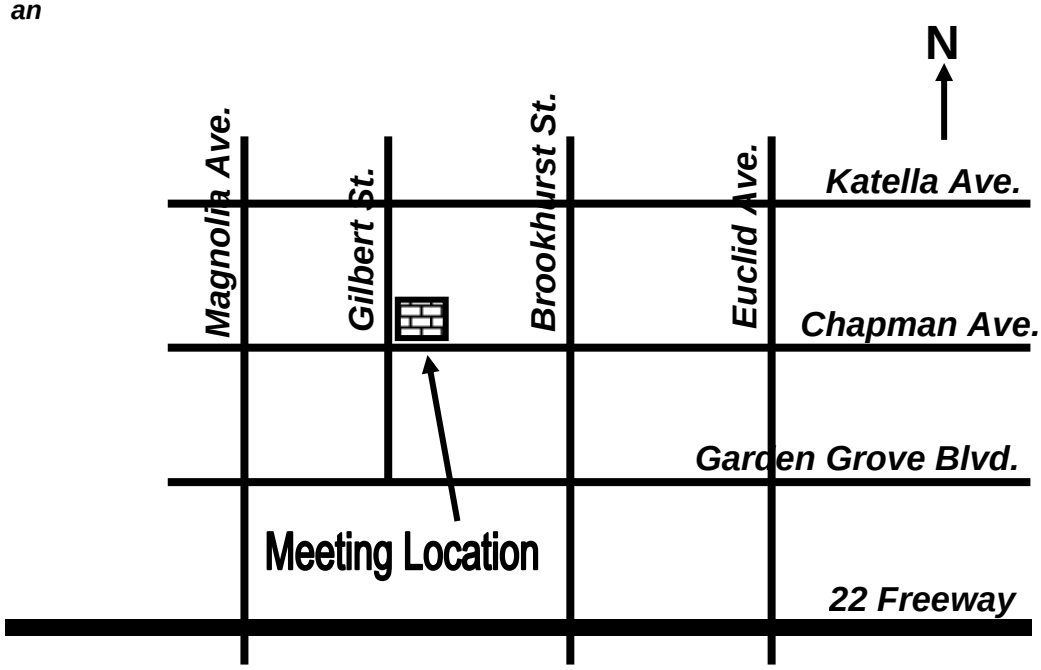
- **A Trip to the Royal Peacock Mine**
- **Gold-bearing Tellurides**
- **Man Unearths 2.89 Carat Diamond**
- **Bumblebee Agate / Jasper**
- **Spinel**
- **Oscar Jewelry!**
- **Diamond No Longer Hardest**

Important Dates:

April 10 - General Meeting

Jim Pisani will give a talk on an Introduction to Metal Detecting

April 10 Meeting:
Jim Pisani on
An Introduction to Metal Detecting



— *GENERAL MEETINGS* —

2nd Thurs. of the Month
7:30 pm - 9:30 PM

Garden Grove Civic Women's Club
9501 Chapman Ave.
Garden Grove, CA 92841
(NE corner of Gilbert & Chapman)

MEETING ACTIVITIES
Opal Cutting, Advice, Guest Speakers, Slide Shows, Videos, Other Activities

The American Opal Society
http://OpalSociety.org

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