

ROCK TALK

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**EXPLORE
DISCOVER
SHARE**

TUCSON GEM & MINERAL SOCIETY

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PRESIDENT'S PAGE

EXPLORE DISCOVER SHARE



Hello to you all,

Happy New Year to everyone, hope you had a fantastic holiday season and had time to share it with friends and loved ones. Welcome to 2024! As always, a new year brings new hopes and new challenges to us all. Sometimes it is a new beginning for things. Hopefully you take a moment and look back and ask yourself, did I accomplish the things I wanted to for the year; sometimes life moves so fast and sometimes it seems to drag but, either way, it never stops, so hopefully you succeed.

I hope you had a chance to make it to the postponed Christmas Sale, it was a good time to talk with others and see fellow members. I'm looking forward to the rest of our General Meetings to hear some great lectures and to see all of you in person. For me, I like to try and greet everyone I can before the meetings start and catch up on all the different conversations we have. The club also has events on the TGMS HUB so take a look at all the field trips and activities that are coming up.

The great thing about a new year is that the Show is coming, hope everyone is ready. This year's theme of "Pegmatites" should bring some beautiful exhibits. I hope you signed up to be a TGMS volunteer. The Tucson Gem and Mineral Show® is the largest in the world and volunteered based, what an honor to be part of that. The other plus side of it is you get the behind-the-scenes access. I know for me personally, volunteering on the floor gets me a first look at the displays, and you get to meet some great exhibitors. By now you should have been confirmed by the Committee Chair in the area that you signed up to work in, and it won't be long that the Show will be here!

Look forward to seeing all of you soon,

Michael Hollonbeck



**TUCSON
GEM & MINERAL
SOCIETY**

TGMS General Meeting - November 6, 2023

The General Meeting of the Tucson Gem and Mineral Society was called to order by President Mike Hollonbeck at 7:00 p.m. He introduced new guests and welcomed all attendees (both online and in-person) to the meeting.

ANNOUNCEMENTS:

Members were reminded to take a ticket for the prize drawings.

Members were reminded to wear their name badges and welcome visitors and new members.

Members are to sign up for events online using the TGMS HUB. Nonmembers can contact the office (by phone or email) to get information.

PROGRAM: Dave Korzendorfer introduced Mark Marikos, who presented "The Mantle – That Magnificent Mineralizing Machine." Mr. Marikos explained how our planet was formed and then transformed by multiple forces including plate tectonics, pressure, heat, and water. These forces produced minerals that were deposited across and through the earth. For mineral deposits to be discovered, they must be in a concentrated area, of significant mass, and accessible. He used photographs, a video, diagrams, and charts to explain the process of mineral deposits.

BREAK: A thank you to Dana Slaughter for providing and serving the refreshments.

OLD BUSINESS:

Approval of the September 11, 2023, and October 2, 2023, General Meeting minutes as published in the November/December 2023 issue of Rock Talk: MOTION: To approve the September 11, 2023, General Meeting minutes. Seconded and approved. MOTION: To approve the October 2, 2023, General Meeting minutes. Seconded and approved.

Field Trips: A field trip to the Rowley Mine is scheduled for Saturday, November 11, 2023. A volunteer is needed to help organize field trips. Members are to sign up through the Member HUB.

Micromount Meeting: A Micromount Meeting will be held on Monday, November 13th, at 6:30 p.m. We will be looking at micros starting with the letter "P." Members are to sign up through the Member HUB.

Educational Class: An Educational Class will be held on November 21 from 11:00 a.m. to 12:30 p.m. Bill Shelton will lead this class on "Axinite." Members are to sign up through the Member HUB.

Mineral, Fossil, Jewelry, Arts and Crafts Sale: The Sale is scheduled for Saturday, December 2nd. TGMS members can reserve a table on the TGMS HUB.

NEW BUSINESS:

Volunteers needed: Members were reminded to go to the TGMS HUB to sign up to volunteer for the 2024 Show. Volunteers are also needed to help with a home school group educational event at the club. The date and activities for the home school event will be determined later.

DRAWING FOR DOOR PRIZES: Dave Korzendorfer conducted the drawing. Dana Slaughter, as meeting host, made the first selection. The winners were Bob Royer, Cindy Evans, Ed Madsen, Pam Royer, Art Friedman, Wade Mullin, Deborah Alderman, Eric Fritz, and Dave Evans.

The meeting was adjourned at 8:56 p.m.

Respectfully submitted,

Linda Ross,
Recording Secretary



**TUCSON
GEM & MINERAL
SOCIETY**

TGMS General Meeting - December 4, 2023

The General Meeting of the Tucson Gem and Mineral Society was called to order by President Mike Hollonbeck at 7:00 p.m. He introduced new guests and welcomed all attendees (both online and in-person) to the Holiday General Meeting.

ANNOUNCEMENTS:

Members were reminded to take a ticket for the special holiday prize drawings and to enjoy the candy on the tables.

The Mineral Fossil, Jewelry, Art and Craft Sale date has been changed to December 10.

Members were reminded to wear their name badges and welcome our visitors and new members.

Members are to sign up for events online using the TGMS HUB. Nonmembers can contact the office (by phone or email) to get information.

Competitive Exhibits: Members were encouraged to enter a Competitive Exhibit Case.

PROGRAM: Dave Korzendorfer introduced Les Presmyk, who presented "The New Cornelia Mine, Ajo, Arizona." Mr. Presmyk led us through the New Cornelia Mine history with maps and photos. He reviewed the geological mineral exploration, territorial, and mining history (including the fraudulent schemes of speculators) of Arizona. He then focused on the mining history of Ajo. He reviewed how water, power, rail services, and Ajo were built to support mining operations. Mr. Presmyk then shared photos of beautiful mineral specimens from the mine. Mr. Presmyk then answered interesting questions from the audience.

BREAK: A special thanks to Mike and Barb Cook for providing and serving the holiday refreshments and to Dave and Marilee Crumley for setting up all the decorations.

OLD BUSINESS:

Field Trip: A field trip to the Red Cloud Mine is scheduled for December 9. Members are to sign up through the Member HUB.

Sale: The Mineral, Fossil, Jewelry, Art, and Craft Sale will be held on December 10, 2023, from 10:00 a.m. to 3:00 p.m. at the TGMS building.

Micromount Meeting: A Micromount Meeting will be held on December 11. We will be looking at micros starting with the letters "Q" and "R". Members are to sign up through the Member HUB.

Open House: Brad and Linda Ross will host a Dinosaur open house on Sunday, December 17th from 1:00 to 4:00 p.m. Details are on the HUB.

NEW BUSINESS:

Volunteering: Members are encouraged to volunteer for the Show. Several volunteer committee chairs were present to explain volunteer opportunities. Volunteering is important to support TGMS's educational goals toward our 501(c)3 non-profit status. There are lots of perks for volunteering.

Publicity Flyers and Discount Coupons: Members can pick up flyers and coupon books for the 2024 Show to be distributed to the public.

Mineral Sale: The Arizona Sonora Desert Museum "Rockin' Minerals" sale will be held on January 13 -14, 2024 from 10:00 a.m. to 4:00 p.m.

DRAWING FOR DOOR PRIZES: Dave Korzendorfer conducted the drawing. The Cooks, as meeting hosts, made the first selection. The Crumleys, who decorated for the holiday party, then made a selection. The Crumleys picked the next ticket for prizes. The winners were: John Ebner, Jim McGlasson, John Richardson, Mike Hollonbeck, Mark Marikos, Pattie Rose, Doug Reif, and Deborah Alderman.

The meeting was adjourned at 8:57 p.m.

Respectfully submitted,

Linda Ross,
Recording Secretary



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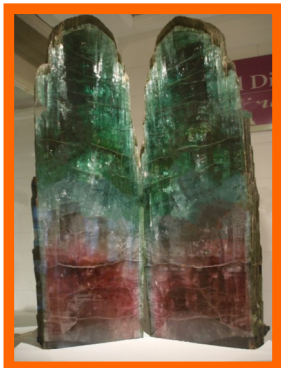
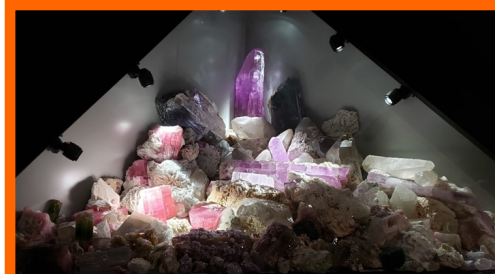
Pegmatites – Crystals Big & Beautiful

By Helen Serras-Herman

Pegmatites – Crystals Big & Beautiful! is the theme for the 69th Annual Tucson Gem & Mineral Show® sponsored by the Tucson Gem & Mineral Society, Inc. The show is held at the Tucson Convention Center, February 8-11, 2024. The theme is indicative and foretelling of the enormous pegmatite crystals that will most probably be on exhibit at the show.

Pegmatite pocket recreation at the Alfie Norville Gem & Mineral Museum in Tucson.

The word pegmatite is a geological/mineralogical term in reference to what type of rock it is. Pegmatites are igneous rocks (one of three rock types), formed by the solidification of magma. Pegmatites show very coarse texture and similar composition to granite, with large interlocking crystals ranging from 1cm to over 3 feet. In rare occasions, some mega-crystals are over 30-feet long. Most pegmatites are composed of the common minerals: quartz, feldspar, mica, and lepidolite, interspersed with tourmaline, spodumene (kunzite and hiddenite), and beryl crystals, including aquamarine and morganite.



A spectacular large, split and polished pair of elbaite tourmalines from Brazil on exhibit at the Harvard Natural History Museum, MA

Lapidaries and collectors can find many pegmatite minerals and their gemmy counterparts including tourmalines and beryl of all colors, kunzites and hiddenites, at this show, as well as spread throughout all the gem and mineral shows in the Tucson 2024 Showcase.

Watermelon tourmaline is a fan-favorite; this large one featured in my necklace is from Afghanistan, 2 1/4" across, 131.0 carats.



There are several rich pegmatite regions in the world including Brazil, Pakistan and Afghanistan, and three famous pegmatite districts in this country. One is in Maine, one in western North Carolina near Spruce Pine, and another near Pala, in southern California. There are a number of mines in all regions; some are closed and historic, while others are still working and producing extraordinary minerals. Local museums feature and explain the pegmatite mines and minerals.

Maine Tourmalines

Tourmalines – Maine's State Mineral – were first discovered in Maine in 1820 at Mount Mica in Paris. Various tourmaline colors have been unearthed there, as well as in a number of other counties in Maine. Although the most common tourmaline is black schorl, beautiful red, green, blue and watermelon tourmalines crystals have been found. Famous jewelry featuring Maine tourmalines include the Maine Tourmaline Necklace created in 1977, and the Hamlin Necklace created in the 19th century.

The Poland Mining Camps – a family and volunteer run organization - offer a variety of digging packages during the summer months.

North Carolina Pegmatites

North Carolina pegmatite with garnets on exhibit at the Museum of North Carolina Minerals, NC

Spruce Pine is located about an hour north of Asheville. Spruce Pine's moniker, The Mineral City, reflects the importance of the minerals mined there. The Spruce Pine Mining District is famous for its feldspar, quartz, kaolin, and mica used today for precision optical, electronic, medical, aerospace and defense applications.



Pegmatites – Crystals Big & Beautiful ... CONTINUED

Gem Mountain Gemstone Mine and Rio Dôce Gem Mine in Spruce Pine on Highway 226 offer a variety of local mineral specimens, finished jewelry, lapidary supplies, gold-panning supplies, and covered sluice mining for rockhounds to find some pegmatite crystals in “native-soil” buckets. The mines are mostly opened seven days a week from Memorial Day through Labor Day.



An over-31 pounds giant aquamarine crystal (on the left) from the McKinney Mine, and a giant green beryl crystal in smoky quartz with mica weighing approximately 13,600 carats discovered in 2015, are on exhibit at the North Carolina Mining Museum at Emerald Village, NC



Local aquamarine crystals for sale at the Rio Dôce Gem Mine in Spruce Pine, NC

Two mines open to the public for tours and gem digging by reservation only are the Brushy Creek and Hoot Owl mines, both owned and operated by Gem Mountain Gemstone Mine. You can find aquamarine, tourmaline, garnet, quartz, morganite, and golden beryl there.

The Emerald Village, located in nearby Little Switzerland, is a mining and historical attraction. The Emerald Village consists of the North Carolina Mining Museum, gift shops, the underground historic Bon Ami Mine, the Discovery Mill Building with 10 different floors of shops and exhibits, and an outside gemstone mine with covered flumes for adults and children to screen for gems, and pan for gold. The Emerald Village also offers the opportunity for fee mineral collecting at the dumps of the McKinney Mines and the Crabtree Emerald Mine.



Black tourmalines are still visible on the ceiling of the historic Bon Ami Mine at Emerald Village, NC

Rockhounds can sluice “native-soil” buckets at the Spruce Pine gem mines

The wonderful Museum of North Carolina Minerals interprets North Carolina’s mineral wealth with many exhibits that highlight the rich mining heritage and the plentiful mineral resources. It is conveniently located at the junction of NC Route 226 and the Blue Ridge Parkway, at Milepost 331, 6 miles east of Spruce Pine.



Pala Mines in California



A spectacular double red tourmaline specimen from San Diego County on display at the San Diego Natural History Museum.

The Pala Gem district is famous for its pegmatite minerals – quartz, feldspar, mica, lepidolite, beryl, aquamarine, tourmaline, kunzite and other rare minerals. The mines have been worked since the second half of the 19th century with the lithium-bearing lepidolite being the main mining target at that time, until pink tourmaline was discovered in 1898 at the Himalaya Mine and the Stewart Lithia Mine. Some material is clean enough for faceting, while most is great for beautiful cabs and carvings.

Pegmatites – CRYSTALS BIG & BEAUTIFUL ... CONTINUED



Lithium-bearing purple lepidolite was the main mining target in California's Pala Gem district in the 19th century. Today it hopefully leads to some good tourmaline at the Oceanview Mine.

The Empress Dowager Tzu-Hsi (pronounced "Tsoo Shee") or Cixi of China was attracted to pink tourmaline's beauty. Most of the pink tourmaline production was purchased and shipped to China for carving, until the beginning of the Chinese revolution and the abdication of her son, Emperor Puyi, in 1912. The mines went dormant and saw a couple resurgences during the 1950's and 1970's, with probably the best revival taking place recently.

In May 2011 during the 5th International GIA Pre-Symposium events, my husband and I had the once-in-a-lifetime opportunity to visit some of the Pala mines otherwise closed to the public.

Beautiful blue-cap tourmaline specimen from the Pala Chief Mine, CA



We visited the Pala Chief Mine and were greeted by mine owner Bob Dawson who first guided us to an outside display of some magnificent tourmaline specimens, aquamarine and morganite crystals, kunzite specimens, and fantastic crystals of quartz with black tourmaline needles, all from the Pala Chief Mine. He then lead us underground into the mine, where he pointed out the lower footwall, the paystreak where all the gems form, and the top hanging wall. Bob Dawson gave details of how they follow the black tourmalines and the lithium-bearing lepidolite that brings them to the small pockets which will hopefully lead them to the large ones.



Smoky and rock crystal quartz with black tourmaline needles and a hot pink tourmaline crystal from the Pala Chief Mine, CA.

At the Oceanview Mine we were greeted by Jeff Swanger, the mine's owner since 2000. Inside the mine we saw the now famous 49er pocket discovered on Jeff's 49th birthday in 2007. The pocket was full of spectacular specimens of quartz, aquamarine, morganite and other minerals embedded in mud.

This real pegmatite pocket with a great bi-color tourmaline crystal was being excavated at the time of our visit at the Oceanview Mine, CA.

Although the underground mine is closed to the public, the Oceanview Mine is open to the public for fee-digging. The team brings out the gem-bearing material and muck blasted inside the mine and deposits it on a pile in the center of a cleared-out area. People can screen for gems at tables with water tubs arranged around the pile. Minerals found there include rock crystal, smoky and citrine quartz, garnets, muscovite mica, clevelandite, kunzite, aquamarine, morganite, purple lepidolite, and red, bi-color and black tourmalines. We also visited the mine on our own on their scheduled fee-dig, and had modest success. I will always remember Jeff Swanger's words: "the best specimen may be found by you, your neighbor, or by the next guy tomorrow".



This deep-color kunzite was discovered at the Oceanview Mine and faceted for them by Brazilian cutters.

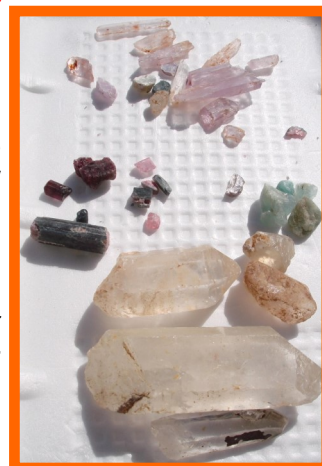
PEGMATITES - CRYSTALS BIG & BEAUTIFUL ... CONTINUED



The Oceanview Mine is also open to the public for fee-digging.

Our modest finds at the Oceanview Mine dig include quartz, tourmaline, kunzite and aquamarines.

We also visited the Stewart Lithia Mine and the shop Gems of Pala, operated by mine owner J. Blue Sheppard. The shop is filled with beautiful tourmaline specimens rough and cut from the mine. It also has an outdoor area where people can screen buckets for gems. The mine is famous for its hot pink tourmaline and the lithium-bearing purple lepidolite.



Black tourmalines on the ceiling of the Stewart Lithia Mine were pointed out by mine owner J. Blue Sheppard

69th Annual Tucson Gem & Mineral Show®

I hope the 69th Annual Tucson Gem & Mineral Show®'s theme Pegmatites - Crystals Big & Beautiful! will inspire you to collect or create with pegmatite gemstones and possibly arrange to visit one or more of the operating mines around the country to try your own luck, or the museums that house great collections of these minerals and jewelry. I am sure that besides the over 250 fabulous dealers, amazing

specimens brought in by museums and private collectors as guest exhibits will honor the show's theme. I will be present at my Gem Art Center/Helen Serras-Herman Booth #1601 in the Ex Hall featuring my Natural Crystals Collection. Looking forward to seeing all of you!



My Natural Crystals Collection features aquamarine and tourmaline crystals

Helen Serras-Herman, a 2003 National Lapidary Hall of Fame inductee, is an acclaimed gem sculptor with over 40 years of experience in unique gem sculpture and jewelry art. See her work at www.gemartcenter.com and her business Facebook page at Gem Art Center/Helen Serras-Herman

All photos by Helen Serras-Herman

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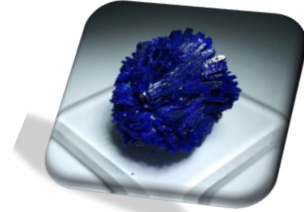
THE 69TH ANNUAL TUCSON GEM & MINERAL SHOW®

Crystals BIG & Beautiful

February 8 - 11, 2024
Tucson Convention Center

for more information, visit: www.tgms.org

December Mineral, Fossil, Jewelry, Art and Craft Sale



TUCSON GEM AND MINERAL SHOW® FEBRUARY 8 - 11, 2024



FLUORITE
May Stone & Sand Quarry
Fort Wayne, Allen Co., Indiana



Scan QR Code for information on
our Tucson Gem and Mineral Show®



SPODUMENE var. KUNZITE
Kunar Province, Afghanistan



ELBAITE, QUARTZ
Santa Rosa Mine
Minas Gerais, Brazil



FLUORITE (Alien Eye)
Erongo Mountains, Namibia

The Tucson Gem and Mineral Society Proudly Presents:

**THE 69TH ANNUAL
TUCSON GEM & MINERAL SHOW***

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PURPOSE: To encourage interest and study in geology, mineralogy, lapidary, and allied earth sciences.

Meetings: Usually the first Monday of the month, starting at 7:00 p.m., except September (second Monday because of the Labor Day holiday), June-August (potlucks). The TGMS facility address is: 3727 East Blacklidge Drive, Tucson, Arizona 85716

The Tucson Gem and Mineral Show @:
The second full weekend in February, starting with Thursday.

Affiliations: American Federation of Mineralogical Societies, Inc. (AFMS), Rocky Mountain Federation of Mineralogical Societies (RMFMS), Visit Tucson, Tucson Metropolitan Chamber of Commerce (TMCC), Greater Oro Valley Chamber of Commerce

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