



Wickenburg Gem & Mineral Society, Inc.

P.O. Box 20375, Wickenburg, Arizona, 85358

E-Mail — wgmsociety@gmail.com

www.wickenburggms.org

The purpose of this organization shall be to educate and to provide fellowship for people interested in rocks and minerals; to foster love and appreciation of minerals, rocks, gems, and the Earth.

Membership shall be open to all interested people.

TRIBOLUMINESCENCE

Triboluminescence is a phenomenon exhibited by non-crystalline materials, and about 50% of crystalline materials -- and it can be very entertaining. Substances known to exhibit it well include: quartz, sphalerite, calcite, muscovite, feldspars, some opals, sugar crystals, "Scotch" and duct tapes, and Wint-O-Green Life Savers (not sugar-free).

What is it, you ask? It is the emission of light, when a substance is rubbed, scratched, ripped, impacted, or crushed. The exact mechanism has not been established; however, it maybe because:

- a) the excitation of electrons causes them to jump into higher energy states, and then to emit light as they fall back to their original state,
- b) a force-generated electrical current causes gases, within the substance, to glow, OR
- c) positive and negative charges separate upon fracture, and when they recombine, the surrounding air is ionized, causing flashing light.

Triboluminescence is broadly synonymous with *fractoluminescence* and *mechanoluminescence*. Many examples of this phenomenon can be viewed on YouTube. Or you can try it at home. In a dark room, bang a couple chunks of milky quartz or quartz crystals together, rub a couple quartz cobbles together, rip adhesive tape, or crush a Wint-O-Green Life Saver (with hammer or teeth --or shoot one with a bb).

USES OF TRIBOLUMINESCENCE

Historically, the Colorado Uncompahgre Ute Indians, made rawhide rattles, filled with quartz crystals. When shaken, the flashes of light could be seen through the hide.

Today, triboluminescent materials may be imbedded into construction materials within dams, bridges, air and space craft, or ships. When these structures experience micro-failure, stresses within the inclusions may cause light to be emitted, and that can be detected by sensors.

NOVEMBER 2017 WICKENBURG GEM & MINERAL SHOW A GREAT SUCCESS!!!

And the vendors are lining up to participate in 2018!

WGMS Show continued on page 2....

DUES ARE ~~DUE~~ OVERDUE!

Get those 2018 dues in, and don't miss a minute of the adventure!! You may mail it in or pay Debbie K. in person at a meeting.

CHRISTMAS PARTY A HOOT

On December 1, 2017, the WGMS annual Christmas Party kicked off with a short business meeting and election of officers. Then down to the real reason we were all there -- to eat great food, enjoy the fellowship of fellow members, and vie for the "Best" gift during the White Elephant Exchange. Paula changed it up this year, with various exchange actions triggered by the number you drew. It ended with all gifts being unwrapped, and the hooting ensued. There were some wild gifts -- including the actual white elephant, that has made a few appearances over recent years.

Christmas Party continued on page 3....

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Lots of attendees browsing and buying



Kid's Table

MEMBER EXHIBITS



Left: Sue & Stan Celestian, Top Center: Erma Roe, Bottom Center: Reserve Bank Mine, Right: Al Roe



BEST ROCK ENTRIES

B
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K
winners



....Christmas Party continued from page 1

FIRST.....we eat!!!



NEXT.....Paula and Craig explain the rules for the White Elephant Gift Exchange



This one looks good.



Which one, which one, which one? So many choices!



So does this one.

Christmas Party continued on page 4....

...Christmas Party continued from page 3



SO cute!



It's a classic!



Careful Bill -- that one bites!!



And it is the white elephant. Will we see it again next year?

HAPPY NEW YEAR!!!



UPCOMING WGMS FIELD TRIPS

WHEN: Monday, January 1, 2018
WHERE: Dragon Mine area
WHAT: Pegmatite minerals, geodes

WHEN: Wednesday, January 17, 2018
WHAT: Fluorite

WHEN: Saturday, January 20, 2018
WHERE: Vulture Mine

WHEN: Wednesday, January 31, 2018
WHERE: 4th of July Peak
WHAT: Chalcedony

WHEN: Tuesday, February 6, 2018
WHERE: Camp Verde
WHAT: Glauberite pseudomorphs

WHEN: Tuesday, February 13, 2018
WHERE: Robson Mining World

WHEN: Tuesday, February 20, 2018
WHERE: Bullard Mine
WHAT: Chrysocolla

WHEN: Tuesday, February 27, 2018
WHERE: Signal City

WHEN: Tuesday, March 6, 2018
WHAT: Mushroom rhyolite

WHEN: Wednesday, March 14, 2018
WHERE: Bagdad

WHEN: Wednesday, March 21, 2018
WHERE: Black Light outing

WHEN: Wednesday, March 28, 2018
WHERE: Burro Creek
WHAT: Lapidary

DATES & PLACES SUBJECT TO CHANGE

CONSIDER VOLUNTEERING TO PLAN OR HELP PLAN TRIPS. YOU WOULD NOT NEED TO LEAD EVERY TRIP, BUT KEEP THINGS ON TRACK

If you all have some place that you would like to go, let Craig J. [208-681-4770](tel:208-681-4770) or Mel C. [502-641-3118](tel:502-641-3118) know. This is your club. Let's go out and have some fun.

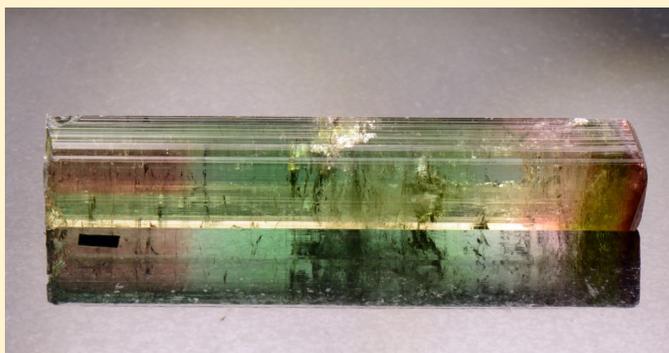
Meeting Minutes — December 1, 2017

No minutes submitted.

MINERALS OF NATURAL HISTORY MUSEUM OF LOS ANGELES



WULFENITE Los Lamentos, Chihuahua, Mexico
 Photo by Stan Celestian and courtesy of NHMLA



ELBAITE Itinga, Minas Gerais, Brazil
 Photo by Stan Celestian and courtesy of NHMLA



SPESSARTINE on ALBITE Pedra Bonita Mine, Carnauba dos Dantas, Rio Grande do Norte, Brazil
 Photo by Stan Celestian and courtesy of NHMLA

UPCOMING AZ MINERAL SHOWS

January 1-February 28 - Quartzsite, AZ Various shows: Desert Gardens, Tyson Wells; For more information go to: <https://www.desertusa.com/cities/az/quartzsite.html#anchor832166>

January 5-7 - Mesa, AZ Flagg Mineral Foundation -- Flagg Gem & Mineral Show; Mesa Community College; 1833 W Southern Av; Fri-Sun 9-5; Admission: free.

January 12-14 - Globe, AZ Gila County Gem & Mineral Society; Gila County Fairgrounds; Hwy 60, 3 miles north of Globe; Fri-Sat 9-5, Sun 9-4; Admission: \$3 indiv, \$5 couple, students/children free.

January 19-February 11- Tucson, AZ There will be many separate shows throughout Tucson during this period. For a general schedule, go to: <http://www.tucsongemshows.net/coming.html>

January 19 - February 11 - Marana, AZ Smoky's Miner's Co-op; 6901 N Casa Grande Hwy; Daily 8:30-6; Admission: free.

February 8-11 - Tucson, AZ Tucson Gem and Mineral Society; Tucson Convention Center; 260 S Church Av; Thur-Sat 10-6, Sun 10-5; Admission: \$13, children 14 and under free.

February 8-11 - Mesa, AZ Apache Jct Rock and Gem Club; Skyline High School, 845 S Crimson Rd.; Sat 9-5, Sun 10-4; Admission: \$3 adults, \$1 students, children 12 and under free.

March 10 - Coolidge, AZ Pinal Gem and Mineral Club; Artisan Village of Coolidge, 351 N Arizona Blvd.; Sat 10-4; Admission: free.

March 24-25 - Anthem, AZ Daisy Mountain Rock and Mineral Club; Boulder Creek High School Gym, 40404 N Gavilan Peak Pkwy; Sat 9-5, Sun 10-4; Admission: \$3 adults, \$2 seniors and children, children 12 and under free.

If you are travelling, a good source of shows AND clubs is <http://www.the-vug.com/vug/vugshows.html> or <http://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?ShowState=AZ> For out-of-the-country shows: <http://www.mindat.org/shows.php?current=1>

A good source for a list of Arizona Mineral Clubs and contact information is http://whitemountain-azrockclub.org/Public_AZ_Clubs_Links.html

ELECTIONS COMING -- DUTIES OF CLUB OFFICERS

The club will be holding election of officers in December. Anyone willing to fill an opening please contact Craig or Debbie. The vitality of our club is dependent on the participation of the members! The club was founded in the early 1970's and the current membership is 127. Please consider lending your talents.

Officers and Chairperson

President: Craig Jones.....208-523-9355
Vice President: Mel Canter 502-641-3118
Secretary: Judy Zimmerlee..... 517-652-1355
Treasurer: Debra Keiser..... 928-684-1013
Program Director: Dale Keiser..... 928-684-1013
Publicity: currently open position
Membership: Roma Hagan 602-469-7662
Editor: Susan Celestian 602-361-0739
Field Trip: Craig J, Bob B, Mel C
Show Chair: Beth Myerson.....480-540-2318
Scholarship Chair: Steve Hill..... 928-533-3825
Historian: Jeanine Brown..... 928-684-0489

Meetings are held the **2nd Friday** most months at **Coffinger Park banquet room**. Potluck dessert at 6:30 pm. Business meeting at 7:00 pm. **Exceptions: February and December** meetings are held on the **first Friday of the month**. We do not meet in the summer — **no meetings in June, July or August**.

**Membership Dues: \$15.00 Adults per Person
 \$ 5.00 Juniors and Students**

Meeting Dates for 2018

Wickenburg: Jan 12, Feb 2, Mar 9, Apr 13, May 11, Sept 14, Oct 12, Nov 9, Dec 7

Stanton meets Thursday after the Wickenburg meetings. Jan 18, Feb 8, Mar 15, Apr 19, May 17, Sept 20, Oct 18, Nov 15, Dec 13 (subject to change)

<http://www.wickenburggms.org/>

If you ever have photos from a club field trip, send a couple to Dale, for posting on the website.

NOTES FROM THE EDITOR

Have a geological interest? Been somewhere interesting? Have pictures from a club trip? Collected some great material? Write a short story (pictures would be great). I'd like topic suggestions also.

! would love to have some pictures from field trips! Snap a couple and send them to me.

Deadline for the newsletter is the 27th of the month.

Mail or Email submissions to:
 Susan Celestian, editor
 6415 N 183rd Av
 Waddell, AZ 85355
 azrocklady@gmail.com

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