

ROCK TALK

Volume 13, Issue 1

**2018 - 2019
Officers & Directors**

President:

Mike Hollonbeck

Vice President:

Les Presmyk

Recording Secretary:

Linda Ross

Treasurer:

Ellen Alexander

Membership Secretary:

Diane Braswell

Director:

Mark Candee

Director:

Marilyn Reynolds

Director:

Bill Shelton

Past President:

Mark Marikos

Parliamentarian:

Alrene Hibben

Librarians:

**Janette Simister & Kathy
Heitzmann**

**EXPLORE
DISCOVER
SHARE**

**TUCSON
GEM & MINERAL
SOCIETY**

ROCK TALK is the official publication and is © 2018 by the **Tucson Gem and Mineral Society, Inc.** to reproduce material contained herein for non-profit use only. All commercial and other use requires written permission from the Tucson Gem and Mineral Society, Inc.

PRESIDENT'S PAGE

EXPLORE DISCOVER SHARE



Welcome to the 2018 - 2019 season with a Show theme of "Wulfenite is Loved!" Hope everyone had a great summer and stayed cool whether it was in Tucson or somewhere else. Thank you again to those who opened their homes so we could enjoy some amazing potlucks with great fellowship and, of course, great food. TGMS held two events at the Children's Museum over the summer and the outings were very successful. The kids were really blown away by our displays.

I am honored to be elected again as President of TGMS, and will continue to serve with honor and enthusiasm. I look forward to meeting all the new members and catching up with previous members. I have spent time learning about the Club and it's history and have been truly amazed at what we do and how our Show is conducted and mimicked by others. Throughout this year you will hear me repeatedly ask for volunteers, so please consider finding a place to fill.

This will be an exciting year with great field trips, monthly meetings and, of course, our 2019 TGMS Show. Keep in mind that our Show is primarily volunteer and I encourage all of our members to plug in where they can. Our Tucson Gem and Mineral Show® is world renown and takes a lot of work so help out and keep it the best in the world. Also consider displaying your collection or entering in the competition exhibits; for more info on this, contact the office.

Our Club is designed to have fun and meet new people, so please find a new face and introduce yourselves to new members or old members you don't know. This Club is here to make friends. I will be walking around each meeting and talking to all of you and I am look forward to catching up. Also, if you have any questions or comments please let me know by phone or email.

I am proud to announce that TGMS will hold the 2nd Annual "Family Fun Day," which will be another way we can reach the Greater Tucson area. This will be an amazing day to let the public get to know about our Club and who we are. If you would like to volunteer, call the TGMS Office for more information; also share this with friends and family, it will be a great time.

Keep in mind the starting time for our General Meetings is 7:00 p.m. in hopes to attract families with kids and individuals who might have jobs that require them to rise early. We hope that more of the Club members will stay for the business part of our meetings as well.

I look forward to all that's in front of us,



**Michael Hollonbeck
President**



**TUCSON
GEM & MINERAL
SOCIETY**



TGMS General Meeting - May 7, 2018

The General Meeting of the Tucson Gem and Mineral Society was called to order by President Michael Hollonbeck at 7:00 p.m. Visitors and new members were recognized and welcomed to the meeting.

ANNOUNCEMENTS: In order to vote for 2018-2019 Officers and Directors, members need to check their name off a current list of active members located on the back desk, then they will be given a ballot.

Bill Shelton's book "The 100 - A Practical Guide to Mineral Collecting in Today's World" is for sale on the back desk. It was published by the New York Mineralogical Club to preserve a series of articles Bill published in their newsletter over four years. The cost is \$15.00 and proceeds will benefit the TGMS Library Fund.

PROGRAM: Dr. Robert Downs, professor of mineralogy in the U of A Geosciences Department, spoke on "The New Gem and Mineral Museum at the University of Arizona." The museum will have 20,000 sq. ft. in the old Pima County Courthouse with 11,000 sq. ft. of displays, plus storage and labs.

BREAK: Thanks to Bob and Elaine Royer for providing refreshments which included vegetables, fruit and cookies.

OLD BUSINESS:

Approval of Minutes for March 5, 2018 and April 2, 2018 General Meetings as Published in Rock Talk: **MOTION:** To approve the minutes. Seconded and approved.

Field Trips: Kerry Towe thanked Tim McClain, Don Cuson and Merritt Simmons for their help with field trips during his absence. There was good collecting with some nice specimens found on the May 5th trip to the Red Cloud Mine. Kerry is planning 14 trips for 2018-2019 and is trying to bring in some new trips.

Educational Class: Wednesday, May 9th, 7:00 – 8:30 pm. Bill Shelton's topic will be "Wulfenite – Crystals, Localities, Varieties and Gems." There is a sign-up sheet on the back table.

Micromount Meeting: Monday, May 14th, 7:00 – 8:30 pm.

Kumihimo Class: May 17th and May 24th, 1:00 – 3:00 pm. Two-day class is limited to ten members. Cost for the Kumihimo Braiding Kit to be purchased at the class is \$15.00.

Summer Potlucks: A volunteer is needed for the July potluck. Hosts for June are Brad and Linda Ross; there is a map on the back table with information. Hosts for August are Wolf and Ortrud Schuh.

Community Outreach: "Libraries Rock" at the Murphy-Wilmot Library on June 2nd. TGMS will have a space at the Tucson Children's Museum on June 18th and July 23rd from 3:00 – 6:00 pm. Volunteers are needed and may sign up at the back table.

NEW BUSINESS:

Approval of the 2018-2019 Society Budget: **MOTION:** To pass the budget. Seconded and approved.

Scholarship Winners: Daniel Collins and Brandon Widener were introduced and each was presented with a \$2500.00 check.

Election of Officers for 2018-2019: Nominations were called for from the floor for each position, but there were none. Members were asked to mark their ballots and pass them in to be counted.

Recognition of 2017-2018 Board Members: Certificates of Appreciation were given to Les Presmyk, Vice President; Ellen Alexander, Treasurer; Diane Braswell, Membership Secretary; Marilyn Reynolds, Recording Secretary; Mark Ascher, Director; Ron Gibbs, Director; Ortrud Schuh, Director; Mark Marikos, Past President; and Mike Hollonbeck, President.

DRAWING FOR DOOR PRIZES: Bob Royer, as meeting host, made the first selection. Winners were Jim Baker, Blaize Naasz, Cathie Logan, Alex Schauss, Ruth Edmark, Bob O'Donnell, Kristin Fitzharris, Barb Elliott, Victoria Fila, Michelle Rucker and Jenna Chacon.

The meeting was adjourned at 8:52 p.m.

Respectfully submitted,
Marilyn Reynolds,
Recording Secretary



**TUCSON
GEM & MINERAL
SOCIETY**

Addendum: Election results were available after close of the meeting and were emailed to the current Board members and general membership. Election results were: President – Mike Hollonbeck; Vice President – Les Presmyk; Treasurer – Ellen Alexander; Membership Secretary – Diane Braswell; Recording Secretary – Linda Ross; Directors – Mark Candee, Marilyn Reynolds, and Bill Shelton; Past President – Mark Marikos.

TGMS Board Meeting - April 25, 2018

Board Members Present: Mark Ascher, Diane Braswell, Michael Hollonbeck, Mark Marikos, Les Presmyk and Marilyn Reynolds.

Absent: Ellen Alexander, Ron Gibbs and Ortrud Schuh

Executive Manager: Pat McClain

Parliamentarian: Alrene Hibben

The Board Meeting was called to order by President Michael Hollonbeck at 6:02 p.m. in the TGMS meeting room.

Call for Orders of the Day: Adjustments to Agenda to amend it pending Ellen's arrival.

Minutes Approval: **MOTION:** To accept the October 25, 2017 Board Meeting Minutes as written. Seconded and approved.

President's Remarks: None

Treasurer's Report: Not present.

Old Business:

Active Membership: Clarified definition was done via an Email Board meeting on November 17, 2017, and subsequently published on new membership application and TGMS website.

Children's Museum in Oro Valley: TGMS has been granted space and will do a pared down version of the Family Fun Day in June and July.

Girl Scouts & Boy Scouts: Suggestion to get involved with something that will apply to their Geology badges. General Membership needs to be engaged.

Property Use: Under advisement. TGMS cannot rent to any function that will jeopardize our non-conforming status.

New Business:

Society Budget 2018/2019:

Building Rental: Orchid Society lease is due for renewal July 1, 2018. **MOTION:** to raise rent to \$125/month and set rental fee for electronic equipment to \$800. Seconded. **Amended Motion:** To change monthly rental to \$100 per month and \$100 per month to rent equipment, plus additional requirement in lease to have insurance for use of the equipment if they use it. Seconded and approved. **MOTION:** To approve amending the original motion. Seconded and approved.

Membership Dues: **MOTION:** To raise Family dues by \$15 and Adults by \$10 without changing Student and Junior dues. Seconded. **MOTION:** To amend Family dues to \$50 and Adults to \$35. Seconded and approved. **MOTION:** To approve the amended original motion. Seconded and approved.

Building Rental: Remove the Miscellaneous Leases item.

Contributions: Boys and Girls Club Scholarships. Ask them to attend a meeting and tell us about what our scholarship does and how we can help them.

Member programs and classes: Instructors may charge if applicable pending approval of a policy by the Board.

TGMS Board Meeting - April 25, 2018 CONTINUED

Need clarification on holding account and information regarding how much repairs, maintenance, etc. will cost.

MOTION: To accept budget with change in Income Funds to remove Miscellaneous Leases and to approve the budget as submitted. Seconded and approved.

Scholarship Applications: Deadline is April 26 so we may have more applications coming in tomorrow which must be considered. Each Board Member is to rank their top five choices from 1 to 5, with 1 being the first choice, and submit their list to Pat McClain and Les Presmyk by 5:00 pm on Wednesday, May 2.

Slate of Officers for 2018-2019: For non-profits having related parties on the Board or Board members related to an employee constitutes a conflict of interest. **MOTION:** To accept recommendations of the Nominating Committee to have a ballot with proposed Directors names for all who do not have a conflict of interest. Seconded and approved. Final ballot is pending acceptance by all candidates for Director.

TGMS Display Cases: The Albuquerque Club has requested our case design and supplier. The design belongs to the supplier in Wisconsin who may have a copyright on it. It was decided to give them the supplier information with a list of the issues we are having with the cases and a request to use a different color.

Dallas Symposium: Request for TGMS to be administrator of donations from the Symposium accepting all the money and writing the checks to the other two recipients, one of which is not a non-profit. TGMS Articles of Incorporation IV specifies TGMS cannot donate to a non-501(c)(3) and the Article cannot be amended; therefore, we must decline the request.

TGMS sponsored ad in NYMC Special Publication new book: "The 100 – A Practical Guide to Mineral Collecting in Today's World" by Bill Shelton. One hundred copies have been ordered for TGMS members to buy if desired.

Call to the Audience: No guests present.

Meeting was adjourned at 9:13 p.m.

Respectfully submitted by

Marilyn V. Reynolds, Recording Secretary

Addendum: Treasurer's Report received via email: Income \$260,815.02 and Expenses \$172,567.30 as of April 20, 2018.

TGMS FAMILY FUN DAY!

Sponsored by the Tucson Gem & Mineral Society

Come and enjoy the fun and "Let Us Rock Your World!"



TGMS Facility — 3727 E. Blacklidge Dr., Tucson, AZ 85716
October 13, 2018 - Saturday 10 a.m. – 3 p.m.

Come and explore the wonderful world of micro minerals, fossils, gold panning, metal detecting, meteorites, rock & mineral identification, fluorescent mineral display, walk through a cave, "color this mineral" contest, a fossil dig, hourly giveaways, "spin the wheel and win a prize", free mineral samples and much much more!

For more info go to www.tgms.org or call TGMS at **(520) 322-5773** -

FREE and Open to the Public!!!





VOLUNTEER !!!

**Contact the TGMS
 Office at 520-322-5773
 or tgms@tgms.org.
 We'd love to have you
 participate!**

WULFENITE IS LOVED...OUR 2019 TGMS SHOW THEME

By Peter Megaw, TGMS Exhibits Chair

Wulfenite ($PbMoO_4$) is as Arizonan as Saguaros, Gila Monsters and Snowbirds...and in 2017 was officially recognized by our Legislature as our Official State Mineral. This puts it in company with Petrified Wood as our state fossil, Turquoise as our state gemstone, the Bolo Tie as our state neckwear and Copper as our state metal. In one way or another all these "official state" designations are an outgrowth of our hobby and Show and reflect the maturing of tastes...with mineral *specimens* finally getting the recognition they deserve!

So why "*Wulfenite is Loved*"? The answer goes back to the late 60s when some (presumably successful) mineral collector scrawled *PbMoO₄ is LOVE* (no "D") on an old shed at the Red Cloud Mine...arguably the world's finest wulfenite locality. Photographs of this graffiti appeared in the mineral collecting magazines and spawned bumper stickers (now serious collector's items) that grazed collector's vehicles until they disintegrated under our fierce Arizona sun. So when our Legislature decided to recognize wulfenite as our State Mineral it seemed right to recognize that love, update the bumper sticker slogan with that missing "D", and make it our Show Theme as quickly as possible. As it turned out 2019 was as soon as we could do it.



Mineralogically, wulfenite is lead molybdate and forms in the oxidized, near-surface parts of lead-zinc-silver-gold deposits...of which we have many in Arizona! When originally described from the Bleiberg (Lead-Mountain) District in Austria, it was called "*plumbum spatosum flavo-rubrum*" but mercifully it was renamed "wulfenite" in 1845 in honor of Franz Xaver von Wulfen who had written extensively on the ores of Bleiberg (<https://www.mindat.org/min-4322.html>). Wulfenite crystallizes in the tetragonal system (remember this year's show theme?) as flat, square, tabular plates, often with pyramidal bevels along the edges. Elongate, dipyramidal crystals are locally common and pseudo-octahedral examples are known. Twinning is common but inconspicuous. Although wulfenite has a high index of refraction and is often transparent and gemmy with bright yellow, orange and red colors, it is a poor gemstone because it is soft (2.5-3) and brittle. Nonetheless, it makes very attractive faceted stones for the careful collector. Careful is the watchword for wulfenite collectors as it often forms spectacularly beautiful...but equally fragile groups of crystals on crumbly matrix. (Los Lamentos, the famous Mexican wulfenite locality is a notable exception to this.)



Many wulfenite occurrences are characterized by enormous open cavities lined with yellow, orange or red crystals...often growing to several inches across. Until just after WWII, wulfenite was one of our major sources for molybdenum (which gives stainless steel strength at high-temperatures and corrosion resistance) so tragically, some large wulfenite occurrences were mined and processed simply for their molybdenum content. The famous Tiger Mine, just north of Tucson, produced 6.3 million (!) pounds of molybdenum oxide (MoO_3) (www.janrasmussen.com/pdfs/Arizona%20Wulfenite.pdf). That means at least 8,500 tons of wulfenite were mined, which jibes with stories of miners raking bright orange wulfenite crystals off the walls and shoveling them into wheelbarrows to haul to the smelter! [For a really scary perspective, this would make a solid cubic wulfenite crystal about 35 feet on an edge] Fortunately, after WWII, metallurgists and miners figured out that it was easier and cheaper to extract molybdenum from the sulfide mineral *molybdenite*...which occurs in HUGE deposits like the Porphyry Copper mines around Tucson...so

our remaining wulfenite occurrences were left for collectors to enjoy. Curiously, for some reason wulfenite does not typically form in *molybdenite*-rich systems, a fact which has been well documented by scientists at the Arizona Geological Survey...including our own Jan Rasmussen (then Wilt) (See Wilt, Keith and Theodore, 1984: <https://pubs.usgs.gov/of/1984/0830/report.pdf>).

WULFENITE IS LOVED ... OUR 2019 TGMS SHOW THEME CONTINUED

For equally mysterious reasons, Arizona and neighboring parts of northern Mexico are exceptionally well endowed with wulfenite occurrences...including many of the world's best known: Red Cloud, Glove, Los Lamentos, Rowley, San Francisco, Tiger, Ojuela, Defiance-Silver Bill, Santa Eulalia, Hilltop and Tucson's own Old Yuma Mine. A good guess is that a combination of long-lived arid conditions and slow, but deeply penetrating oxidation acting on rocks and mineralization of the right compositions led to this preponderance of wulfenite occurrences, a supposition that might be borne out by comparison with other places where wulfenite abounds like the deserts of southern Africa, Iran, Australia and China.

Because wulfenite is such an attractive and popular collector species it is very well represented in the mineral collecting literature. Articles focusing on wulfenite in particular regions like Arizona are worth boning up on (cf, see Rasmussen reference above) and Lithography's books *American Mineral Treasures* and *Collecting Arizona* that went along with our 2008 and 2012 Shows feature superb in-depth articles on specific Arizona wulfenite localities. *Mineralogical Record* has featured articles on specific localities practically since its inception (See especially the Arizona and Mexico Special Editions). As always, *Rocks and Minerals* February issue spotlights our Show Theme, so next year's issue will feature Arizonan and Mexican wulfenite locality articles

written by familiar names...like TGMS VP Les Presmyk...and me!



Check out the TGMS Library for many colorful and informative resources on wulfenite before the Show so you can amaze our visitors with how much you know about wulfenite...**and consider putting that knowledge to work as one of Ellen's docents!** If you're lucky you might get hooked and join the legions of (sure-fingered...the stuff can be fragile) wulfenite collectors...there are almost as many of us as there are fluorite collectors!

FEBRUARY

Thursday 2/14: 10:00 a.m. - 6:00 p.m.

Friday 2/15: 10:00 a.m. - 6:00 p.m.

Saturday 2/16: 10:00 a.m. - 6:00 p.m.

Sunday 2/17: 10:00 a.m. - 5:00 p.m.

WULFENITE IS LOVED



Scan code for
information on our
Tucson Gem and
Mineral Show®

Tucson Gem & Mineral Society presents ... 2019 Tucson Gem and Mineral Show®

“Wulfenite Is Loved”

February 14 – 17, 2019
Open to the Public!

For days, times and discount ticket information: [Click Here!](#)

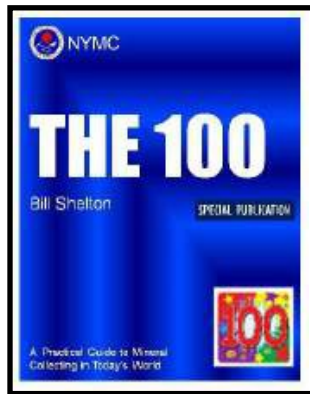
Junior Education Area hours: [Click Here!](#)

For information on the "Grand Prize Giveaway:" [Click Here!](#)

Mineral Photo Contest information: [Click Here!](#)

“The 100 - A Practical Guide to Mineral Collecting in Today's World”

By Bill Shelton - Collector, Writer & Educator



This publication is fully illustrated in color

Over 50 pages

Practical information about 100 of the most available minerals you are likely to collect

\$15.00. each

If you would like to purchase one for yourself, we will have them available at the September 10th General Meeting.

MEANINGFUL MEMBERSHIP

Summer is almost over, hope you had a safe and productive season. Hot summer in Tucson but, in spite of that, TGMS had some very special events that will manage to promote our Society in a very positive way. Two sessions at the Children's Museum (the kiddos were great fun). Wonderful "potlucks" at Brad & Linda Ross, Wolf & Ortrud Schuh and John Callahan & Kathy Steiner. Beautiful homes, exceptional mineral collections and the food, well, what can I say, just too good !! These are just a few of the things that are yours to enjoy with your membership at TGMS.

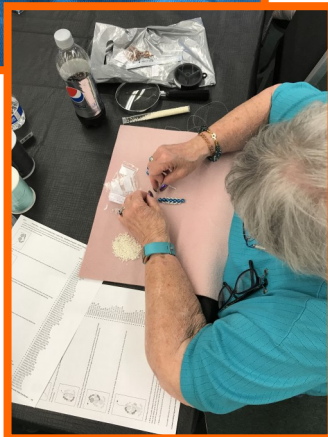
Want to welcome our Renewal Members back and the New Members that have joined. We are looking forward to a new season with several new and a few old venues for the Society and your membership is just the beginning of your support. We will be looking for volunteers for the many events we have planned to focus on Community Outreach, reaching out as a resource for education, participation and fun. Please, help us support these efforts to promote the Society, as well as your help in providing assistance to put forth another great Show, "Wulfenite is Loved." We cannot do it without you !

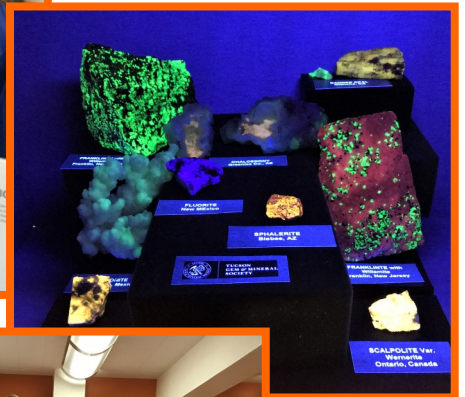
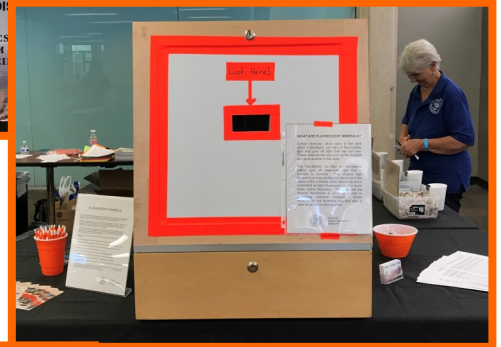
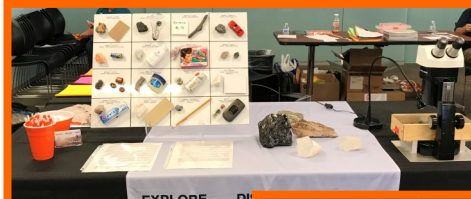
Looking forward to greeting many of you at our first meeting on September 10th. If you have not sent in your form yet, I will be there to take it and welcome you to TGMS. As a help to me and the other Board Members present to recognize you, **please wear your Name Tag**; we will do the same. Also, when you fill out your form, please, include your email address. This is so important to ensure you get notices, Rock Talk and other reminders in a timely manner.

Thank you all so much for your continued support. We, the Board, want to create a friendly, helpful and participatory environment that supports the goals of our Society. Your suggestions are always welcome and your help is absolutely necessary. It is with this commitment that we are able to put on the greatest, gem and mineral show in the world and expand our focus to include promotion and recognition of the importance of our mineral resources to our community.

Diane Braswell,
Membership Secretary

The following is a group of pictures from some of the events that we had this summer ... community outreach at the library, at the Children's Museum ... Kumihimo classes ... and our wonderful summer potlucks!





FROM:

**T.G.M.S.
3727 E. BLACKLIDGE DRIVE
TUCSON, ARIZONA 85716**



TO:

**Tucson Gem and Mineral
Society, Inc.**

**3727 E. Blacklidge Drive
Tucson, AZ 85716**

Phone: 520-322-5773

ROCK TALK is the official publication and is © 2018 by the Tucson Gem and Mineral Society, Inc. to reproduce material contained herein for non-profit use only. All commercial and other use requires written permission from the Tucson Gem and Mineral Society, Inc.

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

ROCK TALK Editor: P. R. McClain

ROCK TALK Assistant Editor: R. Marques

ROCK TALK Reporters/Contributors: Mark Ascher, Anna Domitrovic, Peter Megaw, Diane Braswell, Kerry Towe, Donn Cuson, Helen Serras-Herman, Paul Harter, Ellen Alexander, Bill Shelton