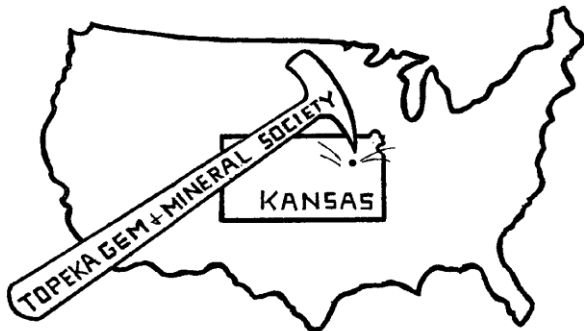


The Topeka Gem and Mineral Society, Inc.  
 1934 SW 30<sup>th</sup> St. Topeka, KS 66611  
 Rock2Plate@aol.com

# THE GLACIAL DRIFTER



www.TopekaGMS or  
 Facebook: Topeka Gem and Mineral Society Field Trips

The Topeka Gem & Mineral Society, Inc.  
 Organized December 3, 1948

Member of Rocky Mountain Federation of  
 Mineralogical Societies American Federation of  
 Mineralogical Societies



The Glacial Drifter, Vol. 60, No. 10, Oct., 2017

The Purpose of the Topeka Gem & Mineral Society shall be exclusively educational and scientific: (1) to promote interest in geology and the lapidary arts; (2) to encourage the collection and display of rocks, gems, and minerals; (3) to encourage field trips and excursions of a geological, or lapidary nature; and (4) to encourage greater public interest and education in gems and minerals, cooperating with the established institutions in such matters.

Meetings: 4<sup>th</sup> Friday of each month, September to May, 7:30 pm, Stoffer Science Hall, Room 138, Washburn University.  
 No meeting in December unless notified of a change. Picnic meetings are held June, July and August.

Dues: Individual, \$15.00; Couple, \$20.00; Junior (under 18 years of age), \$5.00. Dues are collected in December for the following year. Send dues to: **Millie Mowry, Treasurer, 1934 SW 30<sup>th</sup> St, Topeka, KS 66611.**

**www.TopekaGMS.org**

## 2017 OFFICERS AND CHAIRS

President	Mike Cote	220-3272	Cab of the Month	Debra Frantz/Fred Zeferjohn	862-8876
1 <sup>st</sup> Vice Pres.	Dave Dillon	272-7804	Field Trip Coord.	Leslie Hartman	380-6016
2 <sup>nd</sup> Vice Pres.	Carolyn Brady	233-8305	Publicity	TGMS Board	-----
Secretary	Cinda Kunkler	286-1790	Welcome/Registration	Russ & Rhonda Miller	272-6408
Treasurer	Millie Mowry	267-2849	Property	M. Cote/D. Dillon	220-3272
Directors	Harold Merrifield	633-9745	AFMS Scholarship	Cinda Kunkler	286-1790
	Chuck Curtis	286-1790	Editor/Exchange Editor	Millie Mowry	267-2849
	Brad Davenport	379-8700	Show Chairman	Harold Merrifield	633-9745
Historian	Deborah Scanland	273-3034	Show Dealer Chairman	Dave Dillon	272-7804
Federation Rep	Harold Merrifield	633-9745	Show Secretary	Cinda Kunkler	286-1790
Corporation Agent	Millie Mowry	267-2849	Jr. Rockhound Leader	Jason Schulz	640-6617
Librarian	open	-----	Show Case Coordinator	Francis Stockton	913-645-1131
Web Master	Jason Schulz	640-6617			

Area Code for all numbers is (785).

### EXCHANGE BULLETINS WELCOME

For exchange newsletters contact the club via mailing address listed above or email at [rock2plate@aol.com](mailto:rock2plate@aol.com) .  
Permission is granted to reprint articles only if proper credit is given to the author, Glacial Drifter and the date.

**THANK YOU**



### Words from Our President

A Huge Thank You, to all that helped with the show! It would not have been a success without your help. Also want to thank all those who came up from the Olathe Gem & Mineral Society, to help man the door table and the auction table. That was a big help to all of us. The totals are not all in yet so we do not know how we did at the show, but the dealers were all happy when they left.

The nomination committee is working hard to come up with a few new members to our Board. We are looking for a replacement for our Historian as she will be moving to Lawrence soon. If you would be interested in learning what she does, let me or David Dillon know.

Before we know it the annual Christmas Dinner will be held at Paisano's Ristorante at 4043 SW 10<sup>th</sup> Ave., on December 1, 2017 at 6 p.m. Dinner will be at your expense, but we will have a good time and install the new/old officers at that time, play a few games and maybe have a few door prizes.

Mike and his Rock Stash



### ***New Members***

***Heidi Kincaid*** ✦ ***Susan Proctor*** ✦ ***William Lindeman***  
***Stan & Joan Sutton*** ✦ ***Larry & Suzanne McFall*** ✦ ***Cheryl Molter***  
***Gilberto Martinez & \*Gilberto I Martinez***

**Visitors are always WELCOME at our meetings!**



The Nomination Committee has selected these candidates to run for the following offices:  
Secretary - Colleen Lightwine

Director - Will Gilliland

2nd Vice President - Leslie Hartman

They will be voted on at the November meeting and take office January 1, 2018.

**Volunteering is the heart**



**beat of YOUR club**

*Event Calendar*

# OCT 2017

# NOV. 2017

1S	
2M	
3T	
4W	
5T	
6F	
7S	
8S	
9M	
10T	
11W	
12T	
13F	
14S	
15S	
16M	
17T	Lessons at the Barn 6 – 9 p.m.
18W	
19T	Wire Wrap Class Millie’s 1-3 p.m 7-9 p.m.
20F	
21S	
22S	
23M	
24T	Lessons at the Barn 6 – 9 p.m.
25W	
26T	Wire Wrap Class Millie’s 1-3 p.m 7-9 p.m.
27F	General Mtg-Washburn Stauffer Science Hall rm. 138 7:30pm.
28S	
29S	
30M	
31T	Lessons at the Barn 6 – 9 p.m.

1W	
2T	Jr Rkhd’s @ TSCPL rm 202, Wire Wrap Class at Millie’s 1-3 p.m. ONLY
3F	
4S	
5S	
6M	
7T	Lessons at the Barn 6 – 9 p.m.
8W	
9T	Wire Wrap Class @ Millie’s 1-3 p.m. 7-9 p.m.
10F	TGMS Board Meeting at Millie’s 7 p.m.
11S	
12S	
13M	
14T	Lessons at the Barn 6 – 9 p.m.
15W	
16T	Wire Wrap Class @ Millie’s 1-3 p.m. 7-9 p.m.
17F	TGMS General Meeting moved up because of Thanksgiving. Washburn Stauffer Hall Rm 138 7 p.m.
18S	
19S	.
20M	
21T	NO Class at the Barn
22W	
23T	Thanksgiving Day -- NO Classes
24F	
25S	
26S	
27M	
28T	Lessons at the Barn 6 – 9 p.m.
29W	
30T	Wire Wrap Class @ Millie’s 1-3 p.m. 7-9 p.m.

Any questions ask Millie at rock2plate@aol.com

Check out the new calendar on our web site

[www.TopekaGMS.org](http://www.TopekaGMS.org)



## Topeka Gem & Mineral Society, Inc. General Meeting – September 22, 2017

Vice President Dave Dillon called the meeting to order at 7:30 pm in Room 138 of Stauffer Hall, Washburn University, Topeka, Kansas. Dave explained how the silent auction would work after the meeting was concluded as there were several guests present. Dave also reminded everyone to stop by and vote for favorite monthly Member Cabs, Member Jewelry, Class Cab, and Class Jewelry. Fred Zeferjohn announced there were 3 Member Cabs, 7 Member Jewelry, and 5 Class Cabs available for being voted on.

Welcome/Registration Chair Rhonda Miller announced there were 29 members, 8 guests, and 0 new members for the meeting. Tickets were drawn for door prizes and winners were allowed to choose their prize.

Dave announced that due to Secretary Cinda Kunkler's absence for this particular meeting, member Shirley Schulz would be taking minutes. Approval of May's minutes will be tabled until they are available. There was no correspondence available.

Treasurer Millie Mowery reported the current balance. Jason Schulz moved to approve the treasurer's report. It was seconded and approved. Millie also that Club Trivets were still available for purchase for \$21.90. No bills were presented.

Publicity Chair Lesilee Hartman reported that the billboards for the Fall Show are up around Topeka. Show coupons are available on Facebook. Show fliers will be available at the Junior Rockhounds Orientation meeting in October. Lesilee stated she has handed out several to local schools. Lesilee reported that Millie also had paper show coupons if members wanted to help distribute them to the community. She stated there would be cameras and signs available for security during the show. Lesilee finished up the publicity report by stating that Andrew Newman and Zach Smith would be joining her on WIBW's Red Couch on October 11<sup>th</sup> at 4pm to help promote the show.

Historian Deborah Scanland reported she is moving to Lawrence and that the club needs to recruit another volunteer to manage the historical documents for the club.

Show Chairs Harold Merrifield & Dave Dillon reported there would be a show meeting at Millie's home on Sept. 27<sup>th</sup> at 7pm. Harold stated we are all set for the show. Dave reported he had received 16 vendor confirmations for the show. There are 10 large display cases and 11 small display cases available. Dave reported that the new show signs and replacements have been ordered. Dave stated he had heard from vendor Woodie's Rock Shop, he wanted to let the Topeka Gem & Mineral Society know that he was bringing several giant geodes specifically to break open at our show. Security set up this year has computers, web cams, and sheriff deputies available. Dave asked Jason to report on the request to one of the local ROTC programs. Jason reported that the Shawnee Heights Navy Jr ROTC program had been disbanded due to the instructor leaving, but he had taken and submitted the request to Topeka High's Marine ROTC program to see if any of the cadets would be willing to come and provide additional security eyes during the show. He stressed that the request was just for additional eyes and report to security or club members. He is awaiting to hear from Topeka High's instructors to see if they have had any cadets interested. Director Brad Davenport asked if there were going to be walkie-talkies available again this year. Dave stated they would be available. Lesilee stated, additionally, there would be available at the Rockhounds Table a rock contest of "How many can you identify" provided by TGMS member Susan. Member Will Gilliland asked if the club would be interested in some Smoky Quartz Crystals from Washburn University's collection for the show.

Webmaster Jason Schulz stated there was no report on the web site as it has been relatively quiet. He reported the Topeka Gem & Mineral Facebook had 235 likes significantly up since May with 103 new likes. The Junior Rockhounds Facebook page is also up over the summer to 147 likes. Jason congratulated the Publicity committee for all the hard work they are doing in promoting the show.

Old business consisted of Millie reporting that this year's Christmas party would be held at Paisano's on Dec. 1<sup>st</sup>. It is a pay for your own dinner and the club hopes everyone will be there.

New business was a request by Dave for members to see the show volunteer lists and sign up to help make this year's show another success.

Field Trip Chair Lesilee stated the field trip would be on September 23<sup>rd</sup> up in the cut to the east of the Topeka Hollywood Theater at 10am. She would like the four Junior Rockhounds receiving the top awards at the meeting to be at the field trip location at 9am to be interviewed by a reporter and a photographer in order to highlight their accomplishments, the Junior Rockhounds Orientation meeting and the upcoming Gem & Mineral Show.

Dave presented the following badges to Junior Rockhound members and pictures were taken. Receiving the leadership badge were Andrew Newman, Mikala Hartman, and Kaitlynn Hartman. Receiving the Gemstone Lore & Legend and Fluorescent Mineral badges was Robert Schulz. In a special presentation, the Junior Rockhounds had four members who having completed all 20 badges were honored with the AFMS Junior Rockhound Cloisonné pins, TGMS Star Student Certificates, Name Badge additions, and their names will be posted on the AFMS/FRA Rock Stars honor web page. Those junior members honored were Isaac Hartman, Ian Schulz, Robert Schulz, and Zach Smith. They are joining the one other AFMS Rock Star in Kansas and the 27 others nationally. With no further business, we adjourned to our program of the silent auction.

Once the auction was concluded Fred announced Brad Davenport had won Member Cab of the Month with a Ruby and Zoisite. Millie Mowry won Member Jewelry with a Beaded Mexican Lace Bird, Ian Schulz won Class Cab with a Heart Shaped Montana Agate.

Respectfully submitted by Shirley Schulz for Cinda Kunkler, Secretary.

## TOPEKA JUNIOR ROCKHOUNDS

<https://www.facebook.com/TopekaGMSJuniorRockhounds>

To register for the Junior Rockhounds or any of the classes, email: Leslie Hartman at: [Hartman.12345@hotmail.com](mailto:Hartman.12345@hotmail.com)



### JR ROCKHOUND CLASSES

Here are reminders of the next 3 months of classes: Topeka Shawnee CO Public Library sign in starting at 6:00pm and classes starting at 6:30pm. 1st Thursday of each month...

- ❖ Thursday, November 2<sup>nd</sup> Stone Age Tools & Art class instructor Leslie Hartman **Anton Room 202**
- ❖ Thursday, December 7<sup>th</sup> Fossils instructor Pat Gilliland Room TBD in November .
- ❖ January class Leadership with instructor Leslie Hartman DATE AND ROOM TBD

## Activity Center

During the general meeting at Washburn University 1700 SW College Ave., Topeka, KS in the Stoffer Science Hall Room 138 there is an Activity Center for Jr Rockhounds from 7:00pm-7:30ishpm. Isaac Hartman will be presenting a few surprises for the Jr Rockhounds and an activity.

### TGMS and Jr Rockhounds Activities

At this point the next upcoming event for TGMS and Jr Rockhounds will be February 2018 at the Topeka Discovery Center. Email Leslie Hartman [Hartman.12345@hotmail.com](mailto:Hartman.12345@hotmail.com) for questions.

### TGMS and Jr Rockhounds Field Trip

Saturday, October 28, 2017 will be the next field trip. This will not be any ordinary field trip. The TGMS Jr Rockhounds will have the opportunity to visit Brad Davenport, TGMS member, rock shop located at 8049 SE 29<sup>th</sup> St. Tecumseh, KS 66542. You can contact Brad at 785-379-8700 and [brad7254@gmail.com](mailto:brad7254@gmail.com) or Leslie Hartman at 785-380-6016 and [Hartman.12345@hotmail.com](mailto:Hartman.12345@hotmail.com) if you have any questions or you get lost. We will meet at Brad Davenport's rock shop at 10:00am.

This field trip will only be for the Jr Rockhounds with their parents. Brad will first talk to the students about safety in the shop then the students will pick a rock to cut. While the rock is being cut the students will get some Green River shale with fish in it. The students will split open the shale to find the fish. The longer the students stay the more rocks they can pick and have cut and more fish they can find. [hartman.12345@hotmail.com](mailto:hartman.12345@hotmail.com) or 785-380-6016



WORKING TOGETHER WORKS



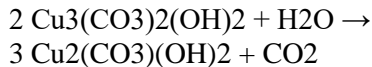
## Azurite

Azurite is a beautiful, deep blue copper based mineral, copper carbonate hydroxide ( $\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$ ). Its Mohs hardness is a rather soft 3.5 to 4.0 (your fingernail is about 3.5 on the Mohs scale). Despite being very soft, jewelry made from azurite can be found. It would be better as a pendant or earrings rather than as a ring.

Azurite has been known for many millennia. It is mentioned in Pliney the Elder's "Natural History" where it is referred to by its Greek name "kuanos" and its Latin name "caeruleum". The name "Azurite" is derived from Persian "lazzward" an area known for lapis lazuli. Interestingly, lapis lazuli in Persian would be "stone of azure" or "blue stone".

Azurite is found as crystalline specimens, in massive and nodular form, and sometimes found in stalagmites and stalagmites. In addition to being used in jewelry azurite was used as a pigment in paints. Azurite was used as a blue pigment for paint as early as 2613 BCE (this is what Wikipedia shows). It was also used by many medieval painters. The fundamental problem with using azurite as a pigment is that it will slowly weather into green malachite. Thus, if you were to look at Raphael's Madonna and Child Enthroned with Saints you would note that sky background now has a distinctive greenish tint.

The chemical reaction for the weathering process is:



Heat and moist conditions accelerate the weathering process. Ancient paintings and mineral specimens need

be kept in a cool, dry environment to greatly slow down the weathering process.

Azurite is found in many localities; virtually any location where copper is found can be a source for azurite. Some locations for the best mineral specimens include France, Namibia, Morocco, United States (Arizona) with more recent finds include Morocco, China, and Mexico. Early pigments derived from azurite were

References:

\_ GIA, <https://www.gia.edu/>  
\_ Wikipedia, <https://en.wikipedia.org>  
Via Chips and Chatter 03/2017  
Via Stoney Statements Oct 2017



## Be Aware of Nail Polish

25% of nail polishes now contain TPHP (Triphenyl Phosphate) a plasticizer, according to the Centers for Disease Control and Prevention. They say, "Repeated exposure of TPHP may cause minor changes in the blood enzymes." Animal studies found that overexposure to TPHP causes muscle weakness and paralysis. The CDCP injected TPHP (also a neurotoxin) into cats and found it caused the cats paralyzed in 16-18 days after one injection of 0.0001 grams.

I only bring this up because my wife, Teresita, was painting her fingers a week ago. She had only painted three nails when she stood up feeling odd when she fell to the floor. Her body was sweaty cool. I was only a few more seconds to call 911 when she woke up saying she was OK. I have never seen anything like that. She has been painting finger nails ever since I have known her. It was very scary.

*The Agatizer, 10/17 via: Rockhouser Oct 2017*

## Junior Rockhounds - Our Rockhounds have had a busy month.



(Photo courtesy of the Topeka Capital-Journal.)

Four of them--Isaac Hartman, Ian Schulz, Robert Schulz, and Zach Smith--were recognized for completing the program and earned their "Rock Star" pins from AFMS. Dave Dillon, the presiding officer for September's meeting, presented each of the newly minted Rock Stars with their pins and a certificate. Along with this, they were interviewed by the Capital-Journal for an article that ran in the paper on Tuesday, October 10<sup>th</sup>.

Our October Orientation class for the program was well attended. The instructors for each of the classes gave a brief introduction to the topics covered in each unit, giving a good overview of the program from start to finish. There were many things to see and a rousing game afterward.



### On the Color of Smoky Quartz

By Paolo Sanchez, Junior Member of the Pasadena Lapidary Society

The practical mineral collector would've most likely encountered some of the mineral smoky quartz at least one time in his or her life. Whether it would be at gem shows or at rock hounding trips, this crystalline form of silicon dioxide has not really been a major interest of rockhounds. Usually, smoky quartz would just be sold as a faceting material for beginners, or as crystals serving as decor or paperweights.

However, in the scientific community of mineralogy, one thing about this mineral remains of interest: the color. As implied by the name, the color of smoky quartz is, well, **smoky** - ranging from a light tint of brown to a blackish hue. While many people would consider the mineral's color to be rather drab, the origin of this color is actually unique in the mineral world.

A good majority of minerals receive their color from certain elements in their intrinsic chemical composition or from the light absorption and reflection properties of the mineral's crystal lattice. These minerals are known as idiochromatic. Other forms of minerals include allocromatic minerals, where traces of accessory elements alter the absorption of different colors of light throughout the crystal lattice. Smoky quartz, however, gets its color from a rather surprising source.



Smoky quartz is known to form in granitic pegmatites, associated with different minerals and gemstones including tourmaline, cleveite, and aquamarine. What is unique about these pegmatites is that they contain a significant amount of radioactive elements, particularly the elements uranium, radium, and thorium. Because these elements decay from their radioactivity, they emit gamma rays that are then absorbed by the surrounding rock. When quartz (particularly clear quartz) is in close proximity to these elements, the gamma radiation that is absorbed causes aluminosilicate ion impurities [AlO<sub>4</sub>] within the quartz to lose an electron, forming a neutral, aluminosilicate compound which absorbs multiple colors of light.

This coalition between chemical impurities and radioactivity eventually results in the unique, brown to blackish color that gives smoky quartz its name. Fortunately, there is no need to worry about the radioactivity that smoky quartz is exposed to, for the amount of radioactivity in the quartz is so minuscule that it doesn't cause any damage to living species nor the surrounding environment.

While this rather common species of silicon dioxide is often underestimated in most of the rock collecting community, the formation of color in smoky quartz still stands as a unique and relatively rare process in the mineral world.

Picture from Wikipedia—by [Dario Crespi](#)

Works Cited:

- Holden, Edward F. Color of Smoky Quartz and Amethyst. Color Smoky Quartz and Amethyst. N.p., n.d. Web. 1 Nov. 2016
- Nassau, Kurt. Color in Minerals. Color in Minerals. N.p., n.d. Web. 2 Nov. 2016.
- Smoky Quartz. The Quartz Page: Smoky Quartz. N.p., n.d. Web. 1 Nov. 2016.
- Webster, Robert. Practical Gemology: A Study of the Identification of Gemstones, Pearls, and Ornamental Minerals. New York: Arco Pub., 1978.

From PLS Rockhound Ramblings, 4/17 via The Rollin' Rock, 9/17 via: The Rockhouser October 2017

