NEWSLETTER OF THE



Member of: American Federation of Mineral Societies



SEPTEMBER-OCTOBER, 2023

ON THE COVER

OPAL:

Formula: SiO₂ · nH₂O

Opal is structurally classified into three main types, though they grade into one another (Jones & Segnit, 1971; Curtis et al, 2019):

- <u>Opal-CT</u>: originally considered to contain cristobalite and tridymite but probably contains mostly poorly crystalline tridymite plus amorphous silica and sometimes poorly crystalline cristobalite
- Opal-C: contains poorly crystalline cristobalite-like material
- Opal-A: X-Ray amorphous, sometimes divided into two subtypes:

Opal-AG: (Amorphous-Gel) (contains closely packed amorphous silica spheres, which at times form a diffraction grating to create <u>precious opal</u>). Since the packing of the spheres is similar to the structure of a gel, the subscript G ("gel-like") has been added (Flörke et al, 1991; Graetsch, 1994).

——— <u>Opal-AN</u>: (<u>A</u>morphous-<u>N</u>etwork (commonly found as <u>hyalite</u>). It still contains spheres, but much smaller (Lee et al., 2022) and lacks a play of colors.

Transitions between opal-A, opal-CT, and opal-C are common, eg Curtis et al. (2019). https://www.mindat.org/min-3004.html

Photos:

Opal-three pieces from the Smithsonian collection, found in Coober Pedy, Australia Opal-white variety, Susan Burch collection, origin: Welo area, Ethiopia

SAPPHIRE:

Formula: Al₂O₃

A variety of **Corundum**

Most commonly refers to a blue gem variety of corundum, but other colored varieties of corundum are also described as sapphire, except red corundum, which is better known as Ruby. Via Mindat.org

Photos:

Corundum Var. Sapphire - GIA.edu, Courtesy: Bill Larson (Rough), Columbia Gem House (Left), Dr. Eduard J Gubelin Collection (Bottom). (Referring to the group of dark sapphires sitting on the stone box) Corundum Var. Sapphire - Smithsonian collection—Rough in matrix: Llmen Mountains, 28 KM North of Chelyabinsk Oblast, Russia

Corundum Var. Sapphire - Smithsonian collection—Group of cut gemstones

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SOUTH CENTRAL FEDERATION OF MINERAL SOCIETIES, INC.

2022 SCFMS OFFICERS

President: Roger Burford

Executive V-P: Don Shurtz

Secretary: Liz Burford

Treasurer: Henry Rojas

Web Master: Don Shurtz

Exec. Secretary: Kimberly Brannon

AFMS Endowment Fund Raffle: (temporary) Jerrold Simpson

SCFMS Endowment Fund Com. Treasurer: Empty

Nominating Committee – Ron Carmen

Past President:

For more information or to send information to the SCFMS or an officer, please email:

scfmsinformation@gmail.com



PURPOSE

*To promote popular interest and education in the various earth sciences, in particular those hobbies dealing with the art of lapidaries and the science of minerals, fossils, as well as their associated fields.

*To cooperate with educational and scientific institutions or other groups engaged in increasing knowledge in the earth sciences.

*To cooperate with or become members of similar Federations in the United States and elsewhere.

*To assist in the formation of earth sciences societies in localities where public interest justifies their formation.

E-MAIL ADDRESS CORRECTION AND CHANGES

It is each members responsibility to send your email address corrections to the SCFMS Editor:

Susan Burch, scfmseditor@yahoo.com

NEWSLETTER PUBLISHED BIMONTHLY

DUPLICATION

In most instances material in this newsletter may be duplicated for non-commercial purposes providing full credit is given. There are exceptions, please do not assume permissions. For Commercial use, the individual author(s) must be contacted for their approval.

A NOTE FROM —THE EDITOR—

THE FINAL DEADLINE, ETC.



For each newsletter the deadline is the 20th of the month prior to scheduled publication. February-April-June-August-October-December all provide the deadline for the following bi-monthly issue. Although, the Editor may chose to adjust the deadline due to circumstances.

As a reminder! Shop hints and tips that are used in this newsletter have not been evaluated for safety or reliability by myself. Please use caution and safety when trying out any new idea. Please, if you have something urgent give me a call, but send newsletter content via email.

ANNUAL MEETING VIA ZOOM

October 14, 2023

SCFMS WEB-SITE: WWW.SCFMS.NET

The SCFMS is a member of the American Federation of Mineral Societies. amfed.org

NEWSLETTER EDITOR/BEAC:

Susan Burch scfmseditor@yahoo.com





President's Message



Roger Burford SCFMS President

This will be the last newsletter before the convention and I wanted to get you up to date on a few things that have happened this year.

This has been a troubling year for us, while we gained one club in Arkansas, we have had two clubs in Texas decide to suspend their membership and possibly a third due to the lingering effects of Covid. We have been trying to get the word

out to the public that our clubs are here and active which has not been easy. Anyone with ideas for getting the word out to the general public that there is a Gem and Mineral Society in their area and that meetings are being held again. It seems that Walter Beneze in Lubbock has been doing a great job because they are one of, if not the largest club in the Federation.

I was finally able to contact the person who was holding our presentation library, he was no longer active in any club, and I was able to get a major part of it while in Bosier for the Ark-LA-Tex club's show and am working on ideas to pick up the rest. Most of

the presentations are on slides and audio tapes and some on VHS tape, so, I am going to try to come up with a way to get them digitized so they can be checked out for club use, there are companies that will convert the slides to digital images and then I may be able to create a slideshow presentation from that.

This year's convention is an election year and there are numerous openings for district VPs and committee members. The Federation, like your club depends on volunteers to get things done. A majority of the openings may take 20 min. a month to get the jobs done, there are others that are more involved but still

will not take up much of your time during a month but can make a huge difference to the clubs and your Federation.

Remember that this is your Federation and it depends on you to keep it running and to get anything done. As of now, there is only one name proposed for any office and that is Don Shurtz, who currently is the VP. No one has submitted any name to Ron Carman for consideration for any office which means we will be taking names from the floor.

Lastly, all club presidents and VPs are required to attend the convention each year you are members of the board, and the ones who will be voting on officers and any proposals during the convention.

If you are not going to be able to attend, you can submit a delegate form naming who will be attending in your place. This form must be submitted to the Secretary before the meeting starts and will be part of the packet you will receive and I believe it is on the Federation web site. While everyone is saying the meeting is in New Orleans, that is not true, the meetings will be held via Zoom. Look for more information in several other areas of the newsletter.

I look forward to seeing everyone this year.

Roger



OCTOBER 15th

Please, use the most recent form at http://www.scfms.net/forms members.htm

Dues and Insurance payments are usually due before September 30, however this year the deadline has been extended.

Please, use membership numbers as of September 1, 2023.

THANK YOU!



SCHOLARSHIP FUND UPDATE Don Shurtz, Scholarship Fund Chair

The SCFMS does not have a scholarship fund. Instead, we participate in the AFMS Scholarship program. The AFMS has a dedicated AFMS Scholarship Foundation with officers who report to the AFMS. It is through donations that the AFMS Scholarship Foun-

dation that AFMS Scholarships are awarded in six of the seven AFMS Regional Federations. The Southeastern Federation has its own scholarship program, so it does not participate in the AFMS scholar ship program.

The AFMS awards 12 scholarships of \$4,000.00 each year. Two of the scholarships are awarded by the SCFMS Scholarship Honoree. So far this year (since the 2022 SCMFS convention in October 2022 through August 15, 2023), the SCFMS has donated \$2,578.50 from club donations. The Rollin' Rock club is the largest contributor from the SCFMS. The Rollin Rock Club has an auction at each SCFMS Club Show where the right to be in a drawing for the Traveling Treasure Chest is claimed by the auction winner. All The proceeds from the TTC go directly to the AFMS Scholarship Foundation. So far, the Rollin' Rock Club (RRC) has donated \$2,369.00. The third smallest club in the SCFMS, Pleasant Oaks Gem and Mineral Club (POGMC) has donated 209.50. POGMC sells items that have been donated to the club at rock swaps. For POGMC sales, half the proceeds go to the club and half go to the AFMS Scholarship Foundation.

The suggested donation (100% giving) for each club is \$1.00 per member. RRC, with 210 members, has donated more than 11 times the suggested donation (1100%), and POGMC, with only 12 members, has donated more than 17 times the suggested donation (1700%). The rest of the clubs have donated exactly \$0.00. There is still time for donations to be made for our future – education. As indicated, the suggested donation is only \$1.00 per member. If it is not in your club's budget, how about a silent auction at a meeting with proceeds going to the Scholarship Foundation. Alternatively, if your club has a show, a portion of the silent auction or even the entrance fee could be the source of the donation. It is not hard – just use your imagination. This year the donations will be credited through October 15. Donations should be sent to:

Don Shurtz 4004 Dublin Rd. Allen, TX 75002

The donations will be recorded and forwarded to the AFMS Scholarship Foundation Treasurer.

The other way that the AFMS Scholarship Foundations funds scholarships is from their Scholarship Endowment

Fund. The AFMS Scholarship Endowment Fund is not the same as the AFMS Endowment Fund – a fund that provides contingency financial support to the AFMS. Each year the Foundation raffles rock and mineral-related items. The raffle winners are announced at the AFMS annual convention. In 2022 the SCFMS basically failed in purchasing raffle tickets as we did not have a chair for that committee. I am not sure if anyone from the SCFMS won any of the raffle items. Hopefully, we can do better for next year's raffle.



Don Shurtz, AFMS Scholarship Fund Chair

SCHOLARSHIP WINNERS, NOW AND FUTURE Don Shurtz, AFMS Executive VP

Our SCFMS Scholarship Honoree for 2023 is Dr. Robert Gregory from Southern Methodist University (SMU). Mariah Holloway and Katelyn Lehman-Franco, both studying at SMU, were chosen by Dr. Gregory to be the recipients of AFMS Scholarship Foundation scholarships for 2023. Each received \$4,000.00 to help with their studies.

The 2022 scholarships were awarded to Jordan Wright at SMU and Savannah Thomas at North Texas University (NTU). That makes 4 AFMS Scholarships awarded in the North Texas Area in the last two years. Why, you ask. Because the Honorees were primarily from North Texas. The 2022 Honoree was Dr. George Maxie, who is now at the National Parks College but received his degrees from SMU and NTU. Dr. Gregory was nominated by Pleasant Oaks Gem and Mineral Club and Dr. Maxie was nominated by the Hot Springs Geology Club. It is time to look to the east, south, and west to find our Honoree for 2024. The 2024 Scholarship Honoree must be named by December 31, 2023. If we do not have the nominee named by then, the AFMS Scholarship Fund reserves the right to withhold scholarships in the SCFMS area. That means that the Nominations need to be made ASAP. I spent about 30 minutes on the Internet using Google Search and was able to identify schools in Louisiana, Arkansas, and Texas that had Master and Ph.D. Programs in Earth Science-related fields. Now all it would take is for someone in one of our clubs to know someone, preferably someone who has helped your club. If that doesn't work, then all it would take is a few calls to the University to reach the scholarship administrator, and I am guessing that would lead to almost immediate results to find a candidate for being our Scholarship Honoree. Please help us find an Honoree for the 2024 scholarships.

SCFMS OFFICER ELECTIONS and COMMITTEE APPOINTMENTS By Don Shurtz, SCFMS Executive Vice-President

Our SCFMS Annual Meeting is coming up October 14, 2023. The editors and webmasters breakfast, annual meeting and awards banquet meeting will be held via Zoom.

Those who are required to attend are the Board of Directors of the SCFMS. And who, you ask, are the Board of Directors of the SCFMS? They are the SCFMS Executive Officers, District Vice Presidents, and the Executive Officer of each SCFMS Club – i.e., the President of each Club. If a Director is unable to attend, then a Delegate who will attend may be designated in writing and forwarded, before the General Meeting, to the SCFMS Secretary. Attendance via the Zoom Meeting, which will be broadcast (live) is required. Those who attend the meeting in an official capacity should be compensated for their travel.

Generally, the SCFMS budget allocates \$150.00 to each Executive Officer and District Vice President when travel is required. The \$150.00 will not fully compensate most for their travel. One of the items in the 2024 budget is to increase this to \$200.00 per individual. It really needs to be closer to \$300.00, but that is for future budgets. It is expected that each club should compensate their Executive Officer (President or their designated Delegate) for their travel expenses. That compensation should cover the full amount of their travel, but as a minimum should match the SCFMS compensation. By the way, it only costs a few hours of your time and the use of your communication device (Personal Computer or Cell Phone) to attend via Zoom. The Zoom meeting will have provisions for voting.

The primary business that absolutely needs to be addressed at the meeting is the election of Executive Officers and District Vice Presidents, and the passing of an operating budget for 2024. Officers are elected to a two-year term so we will be electing officers for 2024 and 2025.

OK – we are going to have an election. How do we figure out who to elect? At the present time the nominating committee does not have a chair or members, so what are we going to do? The good news is that Ronald Carman has agreed to collect the names of those who would be willing to run for office. He will present that list when the call for nominations from the floor is made. The bad news is, that as of a few days ago, only one person has contacted Ronald about running. Ronald can be reached by email at



rrcarman@centurytel.net. If you can fill one of the Executive Officer or District Vice President positions, please contact Ron as soon as possible. AND BY THE WAY – we also need to fill out the Committee member and chair positions. If you are not sure what they are, please take a look at the SCFMS website Officer and Committee Chair page at http://www.scfms.net/officers committees.htm. The open positions are also listed on page 7 in this newsletter. If you would be willing to be a committee chair or member, please let Ronald know. Elections are not required for committee positions.

If you are worried about the amount of time that would be spent as an officer or committee chair, I am here to tell you that you probably spend more time worrying about it than actually doing the job. I would estimate that most positions require 20 or less hours per year. There are exceptions – the Executive Officers, the Newsletter Editor, the URC committee chair and members, the BEAC, and the Website Contest Chair all come to mind – but most of the rest require only a little effort. Probably the biggest task is writing a report each year for the annual convention.

THE BOTTOM LINES:

If you are a member of the Board of Directors, you need to attend the general meeting. You may attend the Convention in person (desired) or by Zoom. The meeting will be on October 14th at 1:00 P.M. (currently planned, but watch the newsletter and web for any updates).

Consider making the SCFMS better by becoming an officer, a committee chair, or a committee member. If you are wiling to be an Executive Officer, A District Vice President, a Committee Member, please contact Ronald Carman at rrcarman@centurytel.net.

Continued from Pg. 6

OFFICER ELECTIONS THIS YEAR:

(If interested, please contact Ron Carman as soon as possible!)

President, Executive Vice President, and Secretary

OTHER OPEN POSITIONS TO BE FILLED:

District IV Vice President – Central Texas area

District V Vice President – West Texas area

Auditing Committee – Chair and Additional Member

Boundaries (AFMS Liaison)

Commemorative Stamps (AFMS Liaison)

Conservative & Legislation

Constitution & Bylaws Chair

Directory Chair

Education and All-American Awards (AFMS Liaison)

Golden Spark Plug Award

Historian

Junior Programs (AFMS Liaison)

Nominating Committee

Program Library & Competition

Public Relations (AFMS Liaison)

Rockhound of the Year

Safety (AFMS Liaison)

Show Coordinator

Ways and Means





SCFMS SECRETARY'S MESSAGE

Greetings All –

We are in the countdown time now and all the details have been finalized for the SCFMS Annual events. All meetings will be held via Zoom this year

We are asking that every club make every effort to attend. This is an election year and quorum MUST be met in order to complete the voting SCFMS Secretary process for new officers, pass-



Liz Burford

ing of a new budget, and other things that may need to be proposed and brought to the board vote. I do want to remind all, hopefully for the last time, that it is a requirement in our regional bylaws that each officer and each club in the SCFMS send a representative to the annual meeting. I've sent out Delegate forms to all of you. They must be returned to me by email or snail mail no later than October 1. I will begin following up with everyone prior to that date so the quicker the turn around, the better!

Roger has sent out the call for reports to all officers required to turn in reports for the packet. Please note, there is a quick turnaround date on these to be sent back to me. This is so I can get the big report compiled and emailed back to everyone in a timely fashion. This report takes several DAYS to put together so everyone's help with this will be so very much appreciated.

I am the contact for the meetings/conference, so please do not hesitate to contact me with ANY questions.

Sincerely, Liz Burford

SCFMS EDITOR, AUTHOR AND WEBMASTER BREAKFAST AND ANNUAL MEETING UPDATE Liz Burford, SCFMS Secretary

Dear All –

Attached you will find the Delegate Form for each President to fill out and return to me, no later than October 7, 2023. If you will not be attending but will have someone else representing your club, I MUST have this form back in order for your person to be eligible to vote. I am also going to ask that the President of each club (or a designated representative) absolutely let me know whether you will or will not be attending. This is an election year and it is critical that all clubs are represented by their President or Approved Delegate. I will follow up with emails if I do not receive a response from your club.

MEETING INFORMATION:

Due to far too many unforeseen circumstances, the Executive Officers have voted to move the 2023 Annual Meeting online via ZOOM. This is not something we wanted to do but continuing to plan the way it was going definitely could not continue or be tolerated.

ZOOM LINKS:

SCFMS Editor and Webmaster Meeting

Roger Burford is inviting you to a scheduled Zoom meeting.

Topic: South Central Gem and Mineral Society Editor and Webmaster Awards

When: Oct 14, 2023, 8:00 AM Central Time (US and Canada)

Join Zoom Meeting: (Paste this into your web browser)

https://us02web.zoom.us/j/85068900804? pwd=d0JqaEZMcllCZmRKNXFvWnI0WjNlZz09

Meeting ID: 850 6890 0804

Passcode: 9Cnv02

SCFMS Meeting/Conference

Roger Burford is inviting you to a scheduled Zoom meeting.

Topic: South Central Federation of Gem and Mineral Society Conference

Time: Oct 14, 2023 10:00 AM Central Time (US and

Canada)

Join Zoom Meeting: (Paste this into your web browser)

https://us02web.zoom.us/j/82372449346? pwd=MUM0ek9yUUgvbUNMaHN6aXk2b2dpZz09

Meeting ID: 823 7244 9346

Passcode: 824992

NEXT YEAR'S CONFERENCE:

In light of this situation, we will be posting the SCFMS Guidelines for Hosting a Federation Show on the SCFMS Website. These guidelines have been used for many, many years and have proven successful – if followed. They also provide for a set structure from year to year so that the delegates and members of the Federation know what to expect at each show and people are properly prepared. It should be a fun event as people from across the region come together and share their ways of doing things with each other. Many are able to offer valuable guidance, instruction, and most importantly, information to others within the region. Lifetime friendships have been made and people have walked away feeling reenergized and the flame of excitement for our beloved hobby has often been renewed.

We are looking for a location to have our 2024 show (and future ones).

Those of you that have hosted the Federation before, please consider doing so. It is much more fun to meet in person than on Zoom. If you have not hosted the federation

show before, please consider doing so. There are several people who are willing and able to help if you would like assistance.

Please think about it and let Liz Burford or Roger Burford know during the meeting.

SCFMS Conference Phone Links

Phone Links for those without a computer, Dial by your location

• +1 312 626 6799 US (Chicago) • +1 360 209 5623 US

• +1 646 931 3860 US • +1 386 347 5053 US

• +1 929 205 6099 US (New York) • +1 507 473 4847 US

• +1 301 715 8592 US (Washington DC) • +1 564 217 2000 US

• +1 305 224 1968 US • +1 669 444 9171 US

• +1 253 205 0468 US
• +1 669 900 6833 US (San Jose)

• +1 253 215 8782 US (Tacoma) • +1 689 278 1000 US

Meeting ID: 823 7244 9346

Passcode: 824992

Find your local number:

https://us02web.zoom.us/u/kxLavkaBS

Contributions Welcome!

SCFMS exists for the benefit of our member clubs and we are all volunteers. Please consider enriching our club by making a photo, drawing, or written contribution to the newsletter about a geology or earth science related topic.

Pick a topic that interests you and give it a go. Please send it to Susan Burch, Editor, who will work with you to finalize your item for this newsletter.

Please, be sure to send me your show flyer at least several months in advance so, I can share it in our newsletter.

Susan Burch, Editor

51st Annual Gem & Mineral Show

Alario Center

2000 Segnette Blvd. Westwego, LA 70094

October 13th-15th, 2023 Friday & Saturday 10a-6p Sunday 10a-4p



\$6 per day - \$10 weekend pass Scouts in uniform & Kids under I2 FREE \$3 Students, Military, & Members w/ ID

Hosted by: Gem & Mineral Society of Louisiana





www.gmsofla.org



NAME OF ORGANIZATION:

SOUTH CENTRAL FEDERATION OF MINERAL SOCIETIES, INC. ARKANSAS - LOUISIANA - TEXAS

DIRECTOR OR DIRECTOR DELEGATE/ALTERNATE FORM SCFMS ANNUAL MEETING WESTWEGO, LA – OCTOBER 14, 2023

Please fill form or print clearly and return with requested information provided.

| SCFMS DIRECTOR (Your Club President) with email address: | | | | | | |
|----------------------------------------------------------|------------------------------------|----------------|--------------------|---------------------|--------|--|
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| DIRECTOR'S | S DELEGATE/ALTE | ERNATE with em | iail address and O | rganization/Officer | Title: | |
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Below from the SCFMS Constitution and By-laws regarding Delegates:

ARTICLE VI – BOARD OF DIRECTORS: The board of Directors of this Federation shall be the President, Executive Vice President, eight District Vice Presidents, the Secretary, the Treasurer, and the current Presidents of each member society. BYLAWS ARTICLE III – MUTUAL RESPONSIBILITIES

Section 1. It shall be the responsibility of each member society to send its President (who is the Federation Director) to the annual meeting.

Section 2. If the President cannot attend, a delegate shall be appointed and an alternate may be chosen if the member society desires. Section 3. It shall be the responsibility of each member society to notify the Federation Secretary in writing of names of its Director, Delegate and/or Alternate who expects to attend the annual meeting at least thirty (30) days prior to the convening date of the annual meeting.

Section 4. Each member society represented at the annual meeting shall be entitled to one (1) vote.

Section 5. No proxy or absentee vote shall be accepted at the annual meeting.

Send Director/Delegate information no later than October 1, 2023 to: Liz Burford, SCFMS Secretary, 13603 Short Ave., Baton Rouge, LA 70810 or Scfmssecretary@gmail.com





SCFMS DUES AND INSURANCE DEADLINE SEPT. 30 EXTENDED TO OCT. 15

To SCFMS Member Clubs,

Hello all, It's that time of year again! BUT... this will be the final year I'll serve the Federation as Executive Secretary. It's been an amazing ten years serving the Federation in various capacities and I've enjoyed the opportunity to touch base with your clubs annually and the friendships that have developed during my time as an SCFMS officer.



To figure out payment amount, make certain you're using the combined dues and insurance fillable form posted to the SCFMS website: http://www.scfms.net/forms_members.htm As always, please download the form first, (do not attempt to complete within your web browser!) Fill, save, and email or print and include with your payment.

Although the Dues/Insurance Deadline is normally September 30, the deadline has been extended to October 15. As always, make check payable to SCFMS or the South Central Federation of Mineral Societies.

Please note the NEW mailing address is:

SCFMS c/o Kimberly Brannon 5185 Donahue Ferry Road Pineville, LA 71360

If there has been a change in officers since Feb 1st, be sure to update contact information for your new officers via the fillable officer form at http://www.scfms.net/forms/OFFICER_FORM_fillable-saveable.pdf and submit to an SCFMS Officer within 30 days of electing new officers so you don't miss any important communications!

Please note:

•THERE IS A NEW INSURANCE RATE, PLEASE USE THE 2023 FORM!!!!

- •Use membership numbers as of Sept. 1.
- •SCFMS Dues and Insurance payment must be remitted no later than Sept. 30, however, we will extend it this year to October 15.
- •Your club may be dropped from Federation membership and Insurance Program if payment is not received by October 31st.
- •Update any change in your Club Officers promptly.
- •SCFMS Annual Convention will take place via Zoom this year. Hope to see you online!

Thank you,

Kimberly J. Brannon-Saia SCFMS Executive Secretary kimberlyarts@hotmail.com 225.620.5174



THE SOUTH CENTRAL FEDERATION OF MINERAL SOCIETIES Arkansas • Louisiana • Texas

SCFMS Combined Dues and Insurance Form

Dues and Insurance Payments <u>MUST BE RECEIVED</u> before (EXTENSION THIS YEAR) OCT. 15!

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| Club Name: | | | | | | |
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| CONTACT PERSON FOR CLUB: | | | | | | |
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| City: | State: | | | | | |
| Phone: | Email: | | | | | |
| SCFMS MEMBERSHIP DUES 8 | INSURANCE: | | | | | |
| Use club membership count as of Se Yearly adult membership is \$3.75 (\$ Yearly junior membership is \$2.15 (*Junior members are those un There is a 10% late fee if payment is You must download first, then fill/sa to SCFMS or South Central Federation | 2.00 for dues and \$ 80.40 for dues and der 18 years of age received after Septave/print and mail | \$1.75 insurance on September 1 tember 30 or email this con | e) per junior* | a check payable | | |
| # of Adults: | x \$3.75 ea. | \$ | | | | |
| # of Juniors (under 18): | x \$2.15 ea. | \$ | | | | |
| Late fee 10% if received after Septe | mber 30: | \$ | | | | |
| Total Dues and Insurance payme | ent: = | \$ | | | | |
| | DA | ГЕ: | CHECK #: | | | |
| c/o KIM | | ON, SCFMS EXE | OF MINERAL SOCI ECUTIVE SECRETA | | | |





To contact the Executive Secretary email: kimberlyarts@hotmail.com or call 225 620 5174

TOURMALINE WORD SEARCH

Note: The words in the wordsearch puzzle have been underlined and are also listed below. By **Jo Borucki**

| s | A | В | I | A | R | A | Ρ | Υ | Р | U | R | Ρ | L | Ε |
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| Ε | N | I | A | М | L | G | F | R | L | U | В | Н | Т | J |
| ٥ | G | W | s | 0 | 0 | U | М | A | 0 | Ε | Т | I | L | G |
| L | ٧ | R | R | X | R | Т | Т | Z | R | N | N | М | D | A |
| I | R | Ε | A | Z | Q | s | N | I | R | Н | A | S | R | R |
| м | D | 0 | K | N | Υ | K | Т | В | Ε | R | Ν | I | A | D |
| ٥ | s | L | Н | R | I | Ε | X | R | В | A | s | J | ٧ | Ε |
| Ε | М | X | c | c | Ε | Т | Ρ | L | A | W | D | I | I | N |
| Р | н | 0 | Т | 0 | s | ٧ | Ε | В | ٧ | Ρ | L | L | Т | Ρ |
| L | s | I | L | I | c | A | Т | Ε | K | L | D | Q | Ε | R |

| BIZARRE | PARAIBA |
|-------------|------------|
| BORON | РНОТО |
| CANDY | PREHNITE |
| COLOR | PURPLE |
| CRYSTALLINE | RARE |
| DRAVITE | SCHIST |
| GARDEN | SCHORL |
| GRANITE | SIBERITE |
| JEWELRY | SILICATE |
| MAINE | TOURMALINE |
| MARBLE | TRICOLORED |
| PALA | |

Tourmaline is one of my favorite minerals. One website calls it the most candy of all of the candy-colored gemstones. All of these colors captivate all that is within me that loves color, lots of color. The colors include all of the colors in the rainbow, and to make it even sweeter, some tourmaline crystals are bicolored and even tricolored such as the trichromatic elbaite crystal from the Himalaya Mine near San Diego. During our years of rockhounding throughout the west, the tourmaline mines in the Pala Region, San Diego County in Southern California were some of our favorite haunts.

To sweeten the gemstone color pot a bit, the mines also contained blue aquamarines and the violet kunzite, but it was the wide varieties of tourmaline colors that intrigued me. I think that I have at least a small specimen of each color except Siberite and Paraiba.

I have enjoyed making jewelry with some of my tourmaline. My most bizarre piece is so large that one of my friends, as he viewed it, exclaimed that I must have a very strong neck to wear it. The piece is a wire wrap of prehnite, watermelon tourmaline, schorl, pearlized lining of an abalone shell, and an enameled

hummingbird from an earring. I would include the photo of it but you might be laughing so hard that you would be unable to do the wordsearch puzzle. Suffice it to say that I admire tourmaline and sometimes I have fun with it.

Tourmaline is found in granite, granite pegmatites, schist, and marble. It is found throughout the world, and in the United States, in addition to Southern California, it is also in several sites in the southern part of Maine. The tourmaline group of minerals are crystalline silicate minerals, borosilicates where boron is compounded with other elements such as aluminum, iron, sodium, lithium, potassium, or magnesium. Which element is combined with boron determines the color of the mineral. The borosilicate is assumed in all of the colors described below so, only those minerals that create the specific color are listed. Dravite Tourmaline is a sodium, magnesium, aluminum borosilicate. It is named after Dravograd, Slovenia where it was first described. It is also called brown tourmaline and is usually rather drab but occasionally is highly lustrous and beautifully crystalized. Watermelon Tourmaline's outer green ring composition is lithium,

Continued on Pg. 14

Continued from Pg. 13



iron, titanium, or vanadium, and the inner pink area is lithium, chromium, or magnesium. As magma cracks form, they fill with a solution containing water and a variety of minerals such as iron, lithium, and manganese. This variety was first found in Maine. I have bought small samples several times and used them to make earrings.

Elbaite Tourmaline is shown on the chart as a specific form, but from what I read, I see that it can be a group of several varieties including Rubellite (red to pink), Indicolite (blue), Verdelite (green) and Achroite (colorless). It was first found on the island of Elba, Italy in 1913 but is found throughout the world. The Tourmaline Oueen Mine in Southern California produced some of the most beautiful Elbaite. The pink variety was beloved by the Empress Dowager Cixi of China who bought large quantities of it from the Himalaya Mine for gemstones and carvings. Liddicoatite Tourmaline is almost identical in composition to Elbaite except that the calcium atoms are replaced with sodium atoms. It was considered a form of elbaite until 1977 when its unique chemical composition was noted. It is named after Richard T. Liddicoat, a well-known gemologist who was president of GIA and inventor of the diamond grading system. Siberite and Paraiba Tourmalines are both very rare and consequently, very expensive. Siberite is known for its intense purple color and is found in Mozambique and Madagascar, and Paraiba is colored by copper, is a beautiful, intense blue and is found in Brazil.

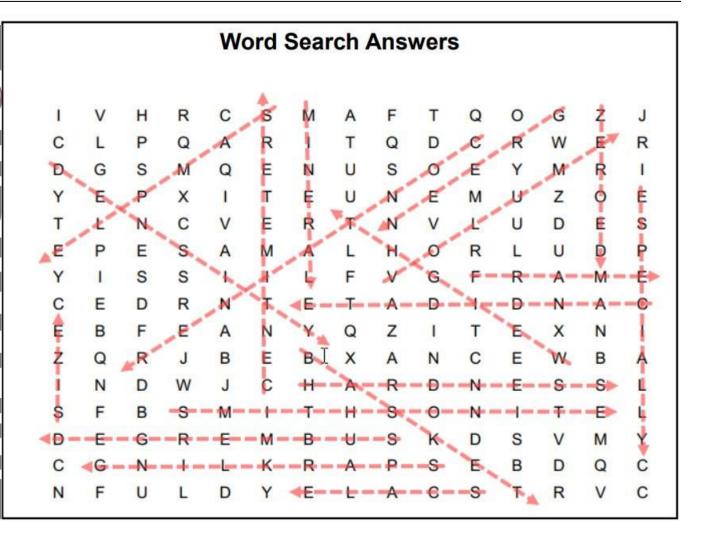
Schorl Tourmaline is the most common form, but it is beautiful in its intense black color. It is never transparent or even translucent. Sometimes Schorl is found within Quartz crystals where it is known as Tourmalinated Quartz. I have found schorl in Southern California and other areas where I have enjoyed rockhounding. There are several samples of it in my rock garden. For photos of beautiful and varied Elbaite crystals, go to mindat.org/gm/1364. For more information, go to Elbaite - Wikipedia Via Breccia 9-23

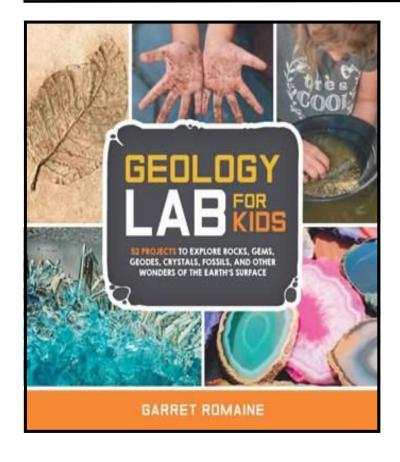
A newly discovered three-eyed relative is disappointingly unrelated to the eerie three-eyed ravens of <u>Game of Thrones</u>. But this Cambrian-era beast is a relative of today's <u>insects</u> and boasts some fearsome limbs. The unique fossilized animal was described in a <u>study published August</u> 28 in the journal <u>Current Biology</u>.



Click the link below to learn more
The early Cambrian Kylinxia zhangi and evolution
of the arthropod head: Current Biology (cell.com)
Or type this address into your browser:
https://www.cell.com/current-biology/pdf/S0960-9822(23)01065-5.pdf







19

SETTLING SEDIMENT

This lab shows how very fine silt and clay settles out until the water becomes clear again.



MATERIALS

- Soil sample (you can use your Fun with Mud sample if you have it)
- 3 large, wide-mouth Mason jars
 - Water
- Screen (optional)
- Coin
- Lab notebook and pen or pencil
- Spoon
 Continued on Pg. 18



Safety Tips - Avoid making a mess.

PROTOCOL

STEP 1: If you still have the soil sample from the Fun with Mud lab, you can use it here. Or you can get another sample. Place it in a jar and fill halfway with water.

STEP 2: Pour only the muddy water into the second jar. If someone holds a screen you can be sure to keep out big pieces of sand and rock.



STEP 3: Place a coin inside your third glass jar and pour in the "dirty water" sample you just made until you are almost to the top of the glass jar. Leave the lid off and allow for evaporation.

STEP 4: Write down your observations. What color is the water? Can you see the coin?

STEP 5: Over the next several hours and days, record more observations. You can use a camera to record each step. If the coin is still showing, you can prepare another "dirty water" sample and pour it in slowly; try not to disturb the sediments that have already settled out. You can do this by pouring your dirty water onto the back of a spoon held just above the surface of the water.



Creative Enrichment

- 1. Use a seashell to show how sedimentation can help make a fossil.
- 2. How many days does it take for the water to clear completely? Is the coin covered?
- 3. If you let the sample dry out completely, you might be able to pretend you are a fossil preparation expert and dig out the fossil from the dried mud.



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https://www.amazon.com/Garret-Romaine/e/B0037I87T8

THE SCIENCE BEHIND THE FUN

Sedimentation like what we saw in this lab occurs in many ocean bays and lagoons all over the world. There are three main kinds of sediment:

- Clastic: pieces of rocks and minerals and mostly sand and silt
- Chemical: different minerals that are suspended, like in the Salty Squares lab. When sea water is super-saturated it can no longer hold any more salt, and the rest begins to fall to the bottom.
- Biochemical: Many forms of sea life create shells to protect themselves. When they die, their shells sink to the bottom of the ocean, forming a calcium carbonate mud. The most common biochemical rock is limestone.

Since 70 percent of the Earth's surface is covered by water, there are a lot of sedimentary rocks formed by sediment simply sinking to the bottom. Over time, those muds and silts build up, and the weight of the water above them can squeeze them together. In the case of an inland sea, you could get thousands of feet of sediment building up over millions of years, but then earthquakes might drain out all that water, leaving only the hardened mud rocks behind. In other cases, you could have land that used to be at the bottom of the sea rise thanks to the way the plates of the crust move around. At some point, all those sediments would be left high and dry. Can you think of any other ways that sediments at the bottom of the ocean could become mountains?

UPCOMING SHOWS 2023

October 13 – 15, Westwego, LA, G&MS of Louisiana, Alario Event Center, www.gmsofla.org/2023-show

October 14 – 15, Temple, TX, Tri-City G&MS, Frank W. Maborn Civic and Convention Center, Irolston@hot.rr.com

October 14 – 15, Fort Worth, TX, CERA (Cowtown G&MS), 3300 Bryant Irving Rd, steve.l.shearin@lmco.com

October 20 – 22, Austin, TX, Austin G&MS, Palmer Events Center, agms-tx.org

November 4-5, Amarillo, TX: Annual show; Golden Spread Gem, Mineral & Treasure Society; Amarillo Civic Center Complex Gooseaa88@yahoo.com

November 10-12, Humble, TX: Annual show; Houston Gem and Mineral Society; Humble Civic Center, Email: show@hgms.org;

November 18-19, Mesquite, TX: Annual show; Dallas Gem and Mineral Society; Dallas TX, 1700 Rodeo Drive, Convention Center Email: dgmscontracts@yahoo.com

Check with the show contact to verify the show status.

