

Tales from Tucson

President's Message

from
Bill Stephens, PG,
President:

**Friends of Mineralogy -
Pennsylvania Chapter
(FM-PA) [2020-present]**

**Friends of Mineralogy
National [2024-present]**



Hello everyone! Well, Tucson was fantastic as usual. Far to much for me to unpack here, but here are some highlights involving FM National Business included below.

Prior to the annual meeting, FM National officers Bill Besse (Treasurer), Jeanine Mielecki (Secretary), and myself moved the accounts from Wells Fargo to Chase Bank after we received word that our non-profit status in California along with our electronic profile had been reinstated. That took some discussion and meetings including a final meeting at Chase bank in Tucson. A lot of work was completed in preparation for this move. All three of us are signatories and old signatories were removed. Kudos galore to former treasurer and bookkeeper Bruce Bridenbecker for all his hard work getting us reinstated as a California-based 501(c)(3), and Don Buchanan for his assistance as well. All three of us have access to Chase branches and Jeanine has excellent service with her personal accounts. Most of us admitted Wells Fargo was not very service oriented.

The annual meeting went off without any issues except poor image quality for some "Zoomers". The attendance was great, with nearly all Chapter Presidents or their representatives in person or via Zoom. See the Minutes for all of the details. I was very pleased with the tone and pace of this meeting where we executed our business agenda efficiently and in near record time. I'm finding that it is important to develop the agenda early, share it for advance discussion, and adhere to the order established by the agenda in order to get business done in a timely manner.

November 2025 FM-PA Symposium
Red, White, and Blue
Minerals of Pennsylvania
anticipated for November 8 at
West Chester University
WATCH FOR NEWS

I have been recording Pennsylvania Chapter symposia and business meetings with Zoom while running those events hybrid via zoom, and recently began using the AI summary feature as a means to refresh our memories mainly for the Secretary's benefit in preparing the minutes, but also for anyone who wants to get a summary (available from me on request). This being my first national Annual Meeting, I found it worked very well as the AI is improving and the more we stick to the agenda outline, the better the summaries. I hope our Secretary Jeanine found it useful.

Without stealing our thunder from the Minutes, here are some highlights from the annual meeting as it pertains to planned FM National activities for this coming fiscal year:

- ▶ Work with Tama Higuchi on a new Logo! Yes she generously offered to assist us and those who know her know she is a consummate and energetic professional. Correspondence has already begun.
- ▶ We have six volunteers to assist with the multi-platform outreach plan I have been talking about for about six months now, including new directors. This plan will include social media, website and other direct advertising to promote the FM National and our Chapters and encourage participation and membership and will begin well in advance of the 2026 Symposium.
- ▶ Complete revisions and modifications as necessary to the Operating Regulations, Bylaws and perhaps the Charter as well to bring our core documents into the modern age, and also to permit moving the organization to another State.

- ▶ As noted in the Minutes, we installed 4 new at large directors, two of which were my housemates this year. I am looking forward to working with everyone on my Board of Directors on various projects and with Chapter Presidents on their missions as the year progresses.
- ▶ Discussions were held by the executive board and with others and a general consensus was reached that we should move the FM Corporation to Arizona. California is just so onerous and frustrating to deal with, and we simply do not have any vested interest in maintaining our organization in that state. We have a permanent vested interest in Arizona because that's where we have our annual meeting and symposium, and also where several officers live, proximity to local banking with Chase, all of which makes it convenient and presumably simpler for us to manage our organization. The final straw in my book was sitting at the bank looking at how the California knuckleheads used an autofill with incorrect information that negatively affected our flexibility with the Chase account setup. I'm President, not CEO. Bill Besse never signs his name Bill Besse, but William R. Besse, and so forth. 'Nuff said.
- ▶ Next year we will assist Mark Jacobson, our Symposium Chair, with running the Symposium fully Hybrid. We plan to use an online registration form similar to the one Erin Delventhal generously created on the website for me last year, as well as advertising and perhaps a social media sign-up. Those who cannot attend in person can pay a small fee to zoom in which will help offset the costs for hard or dedicated Wi-Fi connections with suitable bandwidth and reliability.

As always, Mark ran a fantastic symposium, and most speakers did a great job. There were no technical glitches, but unfortunately I could not run the hybrid portion this year. I'm always amazed at how Mark is able to pull together so many great speakers every year. This coming year (2026) will be his last as symposium chair and we will be shadowing him through every step of his process from the call for papers through the execution of the symposium, which as mentioned above will be fully hybrid and open to the public via zoom for a small registration fee. We have a team assembled.

Next year's TGMS-FM-MSA Show and Symposium theme is Red, White, and Blue minerals, in celebration of the USA's 250th anniversary. I'm already working on a talk for a red mineral, hopefully it will rate for inclusion as a symposium talk??

My experience at Tucson this year was a bit mixed, but overall fantastic. Vehicle issues, unsuitable conditions for work at the house, loss of days with FM business, and plenty of drama back home with some flood damage that was supposed to get fixed while I was away kept me a bit stressed and annoyed, but the field trips and camaraderie kept me psyched despite those annoyances and lost time. I really enjoyed getting together with old friends at the Mineral City and TGMS shows, getting to meet new people as well and getting to know my board better. I did a bit but not a lot of buying.

I gave a presentation at the Symposium on wavellite from Pennsylvania and also had my first ever exhibit at the Main TGMS Show, which in and of itself was initially a bit nerve wracking 'cause I waited to the last minute to get my backboard designed and printed (see photo). Had to go collecting, you know.



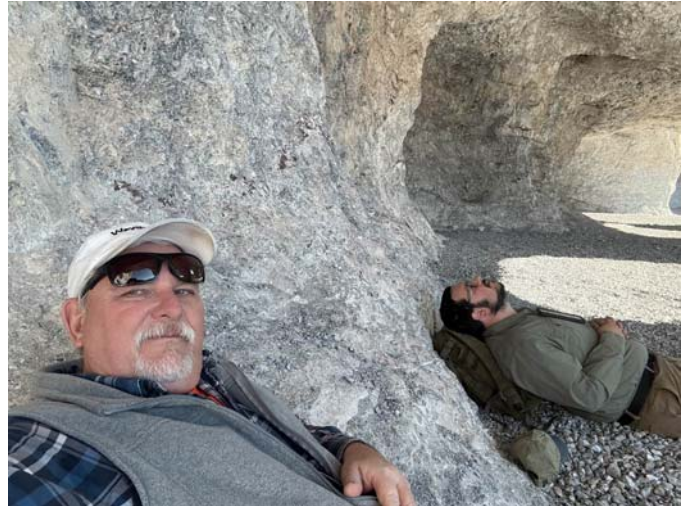
Bill Stephens' wavellite display at the main show

I think one of the most fun and perhaps important developments was getting to know the Young Mineral Collectors (YMC) folks, particularly those sharing the house with me (Sean Price, Tomer Shapira, and Tommy Greene). It's my goal, especially now that YMC is an affiliate of FM and both Tomer and Sean are YMC leadership and new FM Board members, to engage with YMC much more. Our young directors (including VP Nicole Childs and others) are the future of FM, and many we do not yet know that are involved with YMC could eventually bring their talents to FM.

Field trips for me this year included a two-day jaunt to the Red Cloud Mine in Yuma, AZ, day trips to a perlite mine to collect "Apache Tears," to the Finch Mine (wulfenite, etc).



Closeup of quartz druse-coated wulfenite exposed in the ceiling of the underground Finch Mine.



Bill Stephens and Sean Price in the abandoned perlite mine located off Perlite Road near Superior, Arizona.

Scepter Hill (a YMC sponsored trip for amethystine scepters near Nogales), and an undisclosed site in the Patagonia mountains to the south. I also got invited to the Alfie Norville Gem & Mineral Museum by YMC leadership, and was pleased to speak with museum personnel, see the collection and converse with YMC members, some of whom I already knew. YMC also invited me to two events at the Fine Mineral Gallery, but I did not attend either party at Mineral City - too old I

guess. All great fun and I got lots of pictures, video and drone shots/video at the field trip locations and the museum. Look for field trip reports on all but the Patagonia site as the year progresses. If you follow me on Facebook, you may have already seen some cool field trip shots like the ones herein.



Small wulfenite crystals on fluorite exposed in a new road cut through the orebody at Red Cloud Mine.



Sean Price and Tomer Shapira digging for scepters at Scepter Hill.

All for now. Stay Tuned!

CALL For ARTICLES

If you are interested in contributing an article to the National or PA Chapter newsletter, contact our National Newsletter Editor Sean Stimac (articles only) or David Glick for our Pennsylvania Chapter Newsletter.



Young Mineral Collectors group at University of Arizona Alfie Norville Gem & Mineral Museum

Dr. Daniel D. "Doc" Hall 1943 – 2025

With sadness we must report that avid mineral collector, enthusiastic teacher, and FM-PA member Dr. Daniel D. Hall of Columbus, Ohio, passed away on March 2, 2025.

FM-PA extends condolences to his daughter, Sarah Hall, Lt Col, USAF Ret., and all those who knew and will miss him. A full obituary may be found at <https://www.dignitymemorial.com/obituaries/columbus-oh/daniel-hall-12267126>

That obituary reports: "A natural and passionate teacher, Doc taught science, primarily Chemistry and Physics, at the Columbus School for Girls, directed their science department for 34 years, and established their Robotics Team. He believed that a teacher should not just teach their subject well but also invest in their student's lives and futures. Easily spotted in his deerstalker cap, his teaching extended far beyond the classroom. He influenced many generations of scientists, doctors, teachers, bibliophiles, rockhounds, and pebble pups throughout Ohio, the US, and around the world." Sarah Hall reports that he was also a member of The Columbus Rock & Mineral Society (his "home" club), The Cincinnati Mineral Society, The Friends of Mineralogy - Midwest Chapter, and The Russell Society (in England), as well as a founding member of the Sterling Hill Mine/Mining Museum. He was also involved in the New York Mineral



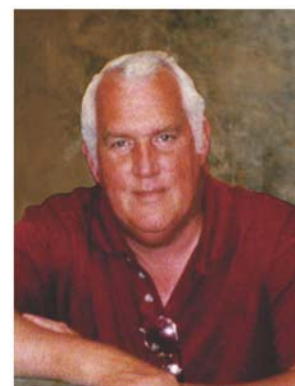
Dr. Hall in earlier years at Columbus School for Girls.
Photographs courtesy of Sarah Hall.



Club for decades. Because he used his collection in his teaching, it was a truly world-wide/all topic collection. However, his real passions were pseudomorphs, ugly rocks that were chemically or mineralogically or geologically fascinating, and marbles/building stones.

"In lieu of a funeral service or memorial, Doc requests that you spend time with your loved ones, read a good book, and eat copious amounts of chocolate." In lieu of flowers, please consider a donation to one of these organizations (full details for donations may be found in the online obituary): Orton Geologic Museum at The Ohio State University; A.E. Seaman Mineral Museum of Michigan Technological University; Columbus Rock and Mineral Society's Ohio College Geology Scholarship Fund. -Editor

Kenton Carl "K.C." Dalby 1948 – 2025



The founder and former president of Friends of Mineralogy - New Jersey Chapter, K.C. Dalby, passed away unexpectedly at home on Friday, March 21, 2025. We extend our sympathies to his wife, children and family.

A full obituary may be found at <https://claytonfuneralhome.com/tribute/details/5657/Kenton-Dalby/obituary.html>. K.C. was born in Bethlehem, PA, and lived on and off in that area before settling in New Jersey in 1983. Known to fellow mineral collectors as the 'Fluorite Guy,' he started the FM chapter in central New Jersey in 2013, and it has gone on to be very popular and successful. We share the loss of an enthusiastic leader with the members of the New Jersey Chapter. -Editor



Good friends ("fellow troublemakers") Pennsylvania mineral collector & vendor Joe Dague (1943-2022), left, and Dr. Daniel Hall, May, 2022.

Thomas J. Pankratz 1944 – 2025

Tom Pankratz passed away on January 19, 2025. FM-PA extends our condolences to his wife and many family members. A full obituary may be found at <https://www.legacy.com/us/obituaries/name/thomas-pankratz-obituary?id=57346585>.



Tom Pankratz leading a field trip, June 2020. *D. Soccio photo.*

Tom was a biochemist and spent his career at DuPont.

He was an FM-PA member and served as our Field Trip Chair from late 2017 through 2020. A great benefit of that position was that it allowed FM-PA to share in many Delaware Mineralogical Society (DMS) trips, where he was also Field Trip Chair.

FM-PA President Bill Stephens writes:

“I was very sad to hear of the passing of our former FM-PA (and DMS) field trip coordinator, Tom Pankratz. Although I had not seen Tom in several years since I took over as President at FM-PA and left the Delaware Mineralogical Society (DMS) where he and I first met, his loss was a personal one for me. He and I were the two VPs at the DMS in the 2010s and we became fast friends with our intense and serious interest in collecting and serving our community of mineral, lapidary and fossil enthusiasts. I was impressed with Tom’s extensive knowledge and energy, especially considering he gained most of it after retirement. He had boundless energy in those days and did a lot of great things for the DMS. We collaborated on field trips and presentations as Field Trips VP and Presentations VP respectively, and he helped me with many improvements to DMS operations. By the time we met at DMS, he was already an accomplished faceter and had quite a collection, but equally important he was constantly doing things to benefit the DMS, including acquiring collections, equipment and the like, and refurbishing equipment in his spare time, donating rocks for outdoor displays at the Delaware Museum of Natural History, the new digs for the DMS I secured with some support from Tom and others.

He and I took several independent field trips together including a fee dig for skeletal quartz at the Diamond Hill



Tom at the Diamond Hill Mine, South Carolina, scratching around in a dump pile looking for amethyst. *W. Stephens photo.*

Mine in South Carolina, and to Herkimer for quartz crystals. You get close on such trips when you rely on each other to execute a successful collecting adventure and all that goes with it. I’ll never forget his pancakes and homemade maple syrup! He sure had bragging rights on the syrup from his trees!

I was with Tom the day our young club member Tim uncovered an in situ amethyst vein at the Glick farm on a field trip, which he and I and Ross Elliott, PG, dug and documented for a PowerPoint I subsequently prepared and delivered to FM-PA. That trip reminded me of how competitive Tom was in field collecting. In the photo of Tom in the main pit at Mount Pleasant Mills, he was once again ahead of me getting some nice calcites in the berm. He is missed.”



Tom down in the main pit at National Limestone Quarry #2 at Mount Pleasant Mills, PA, grabbing some nice calcite in matrix. *W. Stephens photo.*

Fluorescent Calcite and Strontianite from National Limestone Quarry #2, Snyder County, Pennsylvania

by Calvin Harris
FM-Midwest Chapter

Introduction

This paper describes the fluorescence and phosphorescence when calcite (CaCO_3) and strontianite (SrCO_3) from National Limestone Quarry #2 are irradiated by four known wavelengths of ultraviolet radiation. The effects generated by an ultraviolet source with an indeterminate wavelength will also be described.

Site Description

The National Limestone Quarry #2 resides on the north side of Lime Ridge in Snyder County, Pennsylvania, approximately 0.5 mile WNW of the town of Mount Pleasant Mills. From Google Earth, the quarry pit is located at 40.725°N, 77.026°W. It is situated in limestones of the Tonoloway (Silurian) and overlying Keyser (spanning the Silurian / Devonian boundary, approximately 419 million years ago) Formations, units within the Helderberg Group. Aside from calcite, strontianite, and fluorite, the Keyser Formation is noted for fossils of trilobites, gastropods, crinoids and similar remains. Currently, many specimens of fluorescent calcite and strontianite from the quarry have been available through internet sales. The well-publicized wavelite locality is on the quarry property but separate from the quarry pit, just over the crest of Lime Ridge on its south side, in the Ridgeley member of the Devonian Old Port Formation.

Mineral Description

Nineteen specimens were used for this study. They consist of large and small calcite crystals, as well as small strontianite crystals situated on tan colored limestone. The large calcite crystals are tan, translucent and partially developed rhombohedral and scalenohedral forms. They measured no larger than 1.5 cm on edge. The small calcite crystals are clear to light tan, partially to well-developed rhombohedral forms. They measured approximately 1mm. The strontianite crystals were opaque, well-developed acicular forms that measured approximately 1mm.

Test Procedures

Three SuperBright II lamps and one SuperBright III lamp were the sources of ultraviolet radiation. The SuperBright II lamps emit wavelengths measuring 254nm (shortwave), 312nm (mid-wave), and 351nm (longwave), while the SuperBright III lamp emitted a longwave wavelength of 370nm. The lamps were placed 3-4 inches from the specimens to observe fluorescence and 2-3 inches to observe phosphorescence. A DC electric source was used to operate the ultraviolet lamps.

A Vivitar 283 portable electronic flash unit was used to determine flash, or Brief Intense Phosphorescence (BIP). The results indicate that the inorganic activator manganese and co-activator lead are present. This unit produces ultraviolet radiation of an undetermined wavelength. The flash unit is used at its manual setting for maximum output. It is placed 2-3 inches from the specimen, then discharged.

Results of Ultraviolet Irradiation

Specimen A

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright, canary-yellow.	Moderate-bright, lime-green, 5-second duration.
Mid-wave (312nm)	Bright intensity, cream color.	Moderate-bright intensity, canary yellow, 5-second duration.
Longwave (351nm)	Similar to Mid-wave (312nm)	Moderate-bright intensity, cream with yellow tint, 7-second duration.
Longwave (370nm)	Similar to Longwave (351nm)	Moderate-low intensity, cream with yellow tint, 6-second duration.
Undetermined wavelength: No flash; phosphorescence: bright intensity, canary-yellow tint, 4-second duration.		

Specimen B

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate intensity, cream with greenish tint.	Moderate intensity, lime-green, 5-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm), greenish tint less pronounced.	Slightly brighter than Shortwave (254nm), 5-second duration.
Longwave (351nm)	Moderate-low intensity, cream with yellow tint + dark tan.	Low intensity, dull olive-green, 4-second duration.
Longwave (370nm)	Moderate intensity, cream with yellow tint + dark tan.	Moderate intensity, cream, 4-second duration.
Undetermined wavelength: No flash; phosphorescence: moderate-bright intensity, cream with yellow tint, 4-second duration.		

Specimen C

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright, canary-yellow + moderate-bright lemon-yellow.	Moderate-low intensity, lime-green, 6-second duration + moderate-bright, canary yellow, 5-second duration.
Mid-wave (312nm)	Moderate-low intensity, lime-green + moderate-bright canary-yellow colors.	Moderate intensity, lime-green, 5-second duration.
Longwave (351nm)	Moderate-low intensity, pale lime-green + moderate bright cream color.	Low intensity, lemon-yellow, 3-second duration.
Longwave (370nm)	Similar to Longwave (351nm), except for bluish tint.	Moderate-low intensity, gray, 5-second duration.
Undetermined wavelength: No <i>flash</i> ; phosphorescence: Large crystal displayed moderate intensity, lemon-yellow, 2-second duration; smaller crystals displayed moderate-intensity, lemon-yellow, 2-second duration.		

Specimen D

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, canary-yellow.	Moderate-bright, lime-green, 8-second duration.
Mid-wave (312nm)	Bright intensity, canary-yellow.	Similar to Shortwave (254nm), except slightly brighter, 9-second duration.
Longwave (351nm)	Moderate intensity, canary-yellow.	Moderate-bright intensity, canary-yellow, 7-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Similar to Longwave (351nm).
Undetermined wavelength: No <i>flash</i> ; phosphorescence: Moderate intensity, lemon-yellow, 2-second duration + moderate intensity, canary-yellow, 2-second duration.		

Specimen E

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, canary-yellow.	Moderate-bright, lime-green, 6-second duration.
Mid-wave (312nm)	Moderate-bright intensity, canary-yellow; slightly brighter than Shortwave (254nm).	Bright intensity, canary-yellow, 6-second duration.
Longwave (351nm)	Similar to Mid-wave (312nm).	Similar to Mid-wave (312nm).
Longwave (370nm)	Moderate-bright intensity, canary-yellow.	Similar to Longwave (351nm).
Undetermined wavelength: No <i>flash</i> ; phosphorescence: bright intensity, lemon-yellow, 4-second duration.		

Specimen F

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Low intensity, lemon-yellow color.	Very low intensity, dull olive-green, 3-second duration.
Mid-wave (312nm)	Low intensity, yellow with brown tint.	Moderate-low intensity, lime-green, 4-second duration.
Longwave (351nm)	Low intensity, dull brown.	Very low intensity, blue-gray, 3-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Very low intensity, gray, 3-second duration.
Undetermined wavelength: Larger crystal displayed moderate intensity red-orange <i>flash</i> ; 1-second duration. Phosphorescence: moderate-intensity, cream, 2-second duration.		

Specimen G

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright, white with blue tint.	Moderate-low intensity, lime-green, 4-second duration.
Mid-wave (312nm)	Moderate intensity, white with blue tint.	Moderate intensity, lime-green, 4-second duration.
Longwave (351nm)	Moderate-bright, white with blue, tan tint.	Very low intensity, green-gray, 3-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Extremely-low intensity, dull lime-green, 2-second duration.
Undetermined wavelength: No <i>flash</i> ; phosphorescence: low intensity, lime-green, 1-second duration.		

Specimen H

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright, lemon-yellow.	Moderate-low, lime-green, 4-second duration.
Mid-wave (312nm)	Bright intensity, canary-yellow.	Bright intensity, lemon-yellow, 7-second duration.
Longwave (351nm)	Moderate-bright intensity, canary-yellow.	Low intensity, dull lime-green, 4-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Low intensity, light gray, 5-second duration.
Undetermined wavelength: No <i>flash</i> ; phosphorescence: bright intensity, lemon-yellow, 3-second duration.		

Specimen I

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright, lemon-yellow.	Moderate-bright, lime-green, 4-second duration.
Mid-wave (312nm)	Bright intensity, lemon-yellow.	Similar to Shortwave (254nm), 6-second duration.
Longwave (351nm)	Moderate intensity, lemon-yellow.	Moderate-low intensity, lemon-yellow tint, 5-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Similar to Longwave (351nm).
Undetermined wavelength: No <i>flash</i> ; phosphorescence: bright intensity, lemon-yellow, 3-second duration.		

Specimen J

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Bright intensity, canary-yellow.	Bright intensity, canary-yellow, 5-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm).	Similar to Shortwave (254nm), 6-second duration.
Longwave (351nm)	Moderate-bright intensity, canary-yellow.	Moderate-bright intensity, canary-yellow, 5-second duration.
Longwave (370nm)	Similar to Longwave (351nm), but slightly brighter.	Similar to Longwave (351nm).
Undetermined wavelength: No <i>flash</i> ; phosphorescence: bright intensity, lemon-yellow tint, 3-second duration.		

Specimen K

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-low intensity, lime-green.	Moderate-bright intensity, lime-green, 3-second duration.
Mid-wave (312nm)	Moderate intensity, canary-yellow.	Bright intensity, lime-green 4-second duration.
Longwave (351nm)	Moderate-low intensity, canary-yellow.	Moderate-bright intensity, lime-green, 4-second duration.
Longwave (370nm)	Moderate-low intensity, canary-yellow.	Moderate-low intensity, lime-green, 3-second duration.
Undetermined wavelength: No <i>flash</i> ; phosphorescence: bright intensity, lime-green, 2-second duration.		

Specimen L

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate intensity, lemon-yellow.	Moderate-low intensity, lime-green, 4-second duration.
Mid-wave (312nm)	Bright intensity, lemon-yellow.	Moderate intensity, lime-green, 5-second duration.
Longwave (351nm)	Similar to Shortwave (254nm).	Moderate-low, canary-yellow, 5-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Similar to Longwave (351nm).
Undetermined wavelength: No <i>flash</i> ; phosphorescence: bright intensity, lemon-yellow, 3-second duration.		

Specimen M

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, lemon-yellow.	Bright intensity, lime-green, 6-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm).	Bright intensity, lemon-yellow, 7-second duration.
Longwave (351nm)	Bright intensity, canary-yellow.	Bright intensity, canary-yellow, 7-second duration.
Longwave (370nm)	Bright intensity, lemon-yellow.	Moderate-bright intensity, canary-yellow.
Undetermined wavelength: No <i>flash</i> ; phosphorescence: bright intensity, lemon-yellow, 4-second duration.		

Specimen N

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Bright intensity, canary-yellow.	Bright intensity, white with green tint, 8-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm).	Bright intensity, lemon-yellow, 8-second duration.
Longwave (351nm)	Similar to Mid-wave (312nm), slightly less bright.	Similar to Mid-wave (312nm), slightly less bright, 7-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Similar to Longwave (351nm), 6-second duration.
Undetermined wavelength: No <i>flash</i> ; phosphorescence: bright intensity, lemon-yellow, 5-second duration.		

Specimen O

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-low intensity, canary-yellow.	Low intensity, lime-green, 3-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm), slightly brighter.	Moderate-low intensity, lime-green, 3-second duration.
Longwave (351nm)	Similar to Mid-wave (312nm).	Similar to Mid-wave (312nm).
Longwave (370nm)	Low intensity, canary-yellow.	Similar to Shortwave (254nm).
Undetermined wavelength: Moderate-low intensity, red-orange <i>flash</i> ; phosphorescence: Moderate intensity, lemon-yellow, 2-second duration.		

Specimen P

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate intensity, canary-yellow.	Low intensity, lime-green, 3-second duration.
Mid-wave (312nm)	Moderate-bright intensity, canary-yellow.	Moderate-bright intensity, lime-green, 4-second duration.
Longwave (351nm)	Moderate-low intensity, canary-yellow.	Moderate-low, lemon-yellow, 3-second duration.
Longwave (370nm)	Similar to Longwave (351nm), slightly darker.	Low-intensity, lemon-yellow, 3-second duration.
Undetermined wavelength: Large crystal displayed moderate intensity, red-orange <i>flash</i> ; phosphorescence: bright intensity, lemon-yellow, 3-second duration.		

Specimen Q

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Bright intensity, canary-yellow.	Moderate intensity, white with blue tint, 5-second duration.
Mid-wave (312nm)	Bright intensity, canary-yellow.	Bright intensity, canary-yellow, 6-second duration.
Longwave (351nm)	Similar to Mid-wave (312nm).	Moderate-bright intensity, cream color, 4-second duration.
Longwave (370nm)	Moderate-bright intensity, canary-yellow.	Moderate-low intensity, cream color, 4-second duration.
Undetermined wavelength: No <i>flash</i> ; phosphorescence: Moderate-bright intensity, canary-yellow, 2-second duration.		

Specimen R

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, lemon-yellow.	Moderate-bright intensity, lime-green, 5-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm), slightly brighter.	Similar to Shortwave (254nm), slightly brighter.
Longwave (351nm)	Moderate-low intensity, lemon-yellow.	Low intensity, lemon-yellow, 4-second duration.
Longwave (370nm)	Moderate-bright intensity, lemon-yellow.	Moderate-bright intensity, lemon-yellow, 5-second duration.
Undetermined wavelength: No <i>flash</i> ; phosphorescence: Moderate-bright intensity, lemon-yellow, 2-second duration.		

Specimen S

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, yellow with green tint.	Moderate-bright intensity, lime-green, 5-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm).	Similar to Shortwave (254nm), 4-second duration.
Longwave (351nm)	Low-intensity, cream color.	Similar to Shortwave (254nm), except low-intensity, 3-second duration.
Longwave (370nm)	Low intensity, cream color.	Very low intensity, cream color, 3-second duration.
Undetermined wavelength: Large crystal displayed moderate-low intensity, red-orange <i>flash</i> ; phosphorescence: Moderate-bright intensity, lemon-yellow, 2-second duration.		



Shortwave (254nm) fluorescence of specimen O



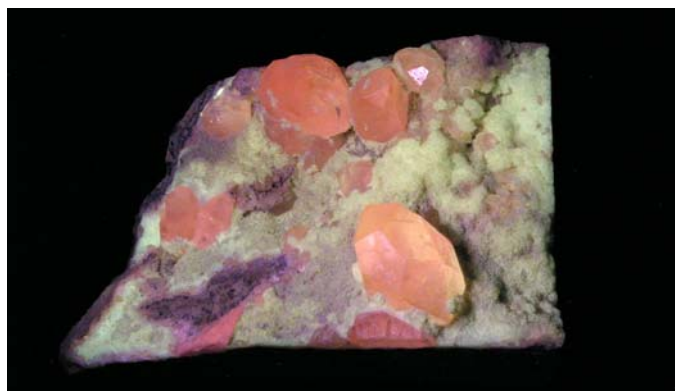
Midwave (312nm) fluorescence of specimen O



Longwave (351nm) fluorescence of specimen O



Longwave (370nm) fluorescence of specimen O



Flash / phosphorescence of specimen O

Summary

Cream-color, lemon-yellow and canary-yellow fluorescent responses were observed; responses from calcite and strontianite were similar. The yellow responses were differentiated by a red color shift from lemon-yellow to canary yellow. Generally, the intensity ranged from moderate-bright to bright; only one specimen displayed low intensity.

The phosphorescent colors were lemon-yellow, cream or lime-green. The intensity was mostly moderate-bright, but very low in some specimens. Duration ranged from 2 to 9 seconds, but typically 5 to 7 seconds.

Specimens F, O, P and S exhibited *flash*, which was observed in the large calcite crystals. However, all of the specimens exhibited a degree of phosphorescence not normally seen when using the Vivitar 283 flash unit. The colors and brightness were comparable to the results generated by the conventional ultraviolet sources, but the duration lasted no more than 4 seconds.

Discussion

The bright cream and yellow fluorescence results suggest that calcite and strontianite developed under low-temperature ($\leq 60^{\circ}\text{C}$) hydrothermal conditions, which allow organic compounds to exist. These minerals have an affinity for fulvic acid and humic acid and can function as activators that cause luminosity. An admixture of organic activators often results in fluorescence having pale colors and pronounced intensity. Similarly, phosphorescence is characterized by pale colors with pronounced intensity and

duration. Additionally, different ultraviolet wavelengths provide their own luminescent characteristics. Studies indicate that the luminosities of speleothems or cave minerals compare favorably to the results described in this study.

High hydrothermal ($>200^{\circ}\text{C}$) temperatures destroy organic activators, but inorganic ions such as manganese and lead are unaffected and can lead to fluorescence and brief intense phosphorescence.

Calcite and strontianite can provide very similar luminosities, and determining if both minerals are contributing to the overall results is a matter to be resolved. Another concern is to determine the wavelength and intensity of ultraviolet radiation produced by the Vivitar 283 flash unit and ascertain why the phosphorescence is considerably more pronounced in the specimens used in this study compared to similar specimens.

SELECTED REFERENCES

- Behr, Rose-Anna, 2014, *Geology and Mineral Resources of the Middleburg Quadrangle, Snyder and Union Counties, Pennsylvania*, pp. 8-10. July 2014. Harrisburg: Pennsylvania Geological Survey, 4th ser., Atlas 135d, 39p. P. 8-10, <https://www.researchgate.net/publication/304380522> (accessed July 6, 2024).
- Boyer, Mark, 2011, *Flash and BIP: The Picking Table*, v. 52(1), p. 16.
- Mindat.org, National Limestone Quarry No.2, Lime Ridge, Mount Pleasant Mills, Perry Township, Snyder County, Pennsylvania, USA, <https://www.mindat.org/loc-145516.html> (accessed June 27, 2024).
- Robbins, Manuel A., 1983, *The Collector's Book of Fluorescent Minerals*: New York, Van Nostrand Reinhold Company, Inc., 289 p.
- Shopov, Yavor Y., 2004, *Activators of Luminescence in Speleothems as a Source of Major Mistakes in interpretation of Luminescent Paleoclimatic Records*: *International Journal of Speleology*, v. 33 (1/4), p. 25-33, <https://www.academia.edu/1> (accessed Nov. 6, 2023).
- Shopov, Yavor Y., 2005, "Activators of Luminescence of Speleothems-Organic versus Inorganic," in *Abstract book of the XIVth International Congress of Speleology*, Athens-Kalamos, Greece. 2005: University Center for Space Research and Technologies, University of Sofia, Bulgaria.: pp-121-125, <https://www.academia.edu/1>
- Shopov, Yavor Y., 2001, *Geospeleología: Luminescence of Cave Minerals*. *Bol. Soc. Venezolana Espel.* (35) 2001: 27-33, <https://www.academia.edu/1> (accessed January 28, 2024).
- Sloto, Ronald A., 2022, *Phosphate Minerals from Lime Ridge, Snyder County, Pennsylvania: The Mineralogical Record*, 53 (5), p. 649-656.
- Verbeek, Earl R., 1995, *Activators in Fluorescent Minerals, Part 2: Some Notable Fluorescent Minerals and Mineral Groups*, in *Ultraviolet Light and Fluorescent Minerals*, Thomas S. Warren, Publisher, 1995, p. 178-179. ✱

EFMLS / AFMS Federation News

FM-PA Chapter is a member of EFMLS, the Eastern Federation of Mineralogical and Lapidary Societies, and therefore an affiliate of AFMS, the American Federation of Mineralogical Societies. We encourage our readers to read the monthly newsletters available on their web sites.

Much of the content of the January, February and March AFMS and EFMLS Newsletters has been about their joint convention in North Carolina, which has just happened as of this writing. They are still worth reading, seeing the photos of Endowment Fund Drawing items, etc.

The AFMS <<https://www.amfed.org/newsletter>> March Newsletter presents Rockhounds of the Year and Junior Rockhounds of the Year from several clubs. There's news on juniors programs; the website, www.juniors.amfed.org, continues to spread the word about the AFMS Future Rockhounds of America programs; see below about the latest *Crack the News* issue. Helen Serras-Herman's article on Wildacres is an excellent summary and explanation of that EFMLS annual week-long retreat in the North Carolina mountains teaching lapidary and other skills.

The Eastern Federation's <<https://efmls.org/>> March Newsletter includes president Andrew "Rockhound's" message on safety - don't forget about safety practices when coming out of the winter break! The safety article is on "Safety in Numbers" - don't go out collecting alone, and if you do, make sure someone knows where you are & when, and check in with them.

-Editor

Crack the News: The AFMS Newsletter for Kids & Teens

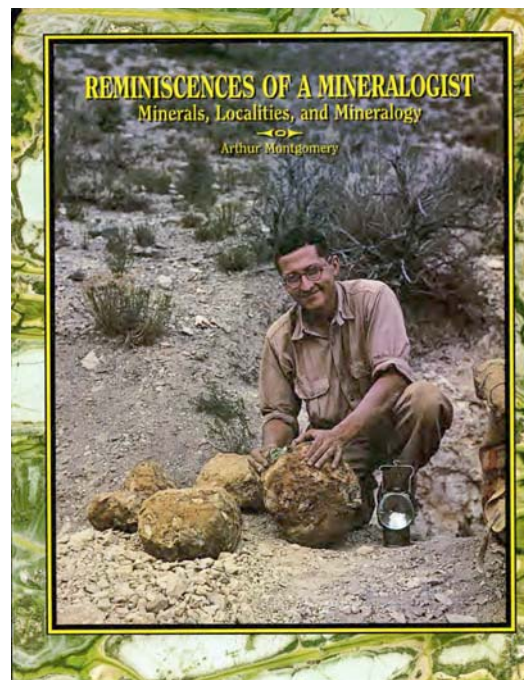
by Dennis Gertenbach, Editor, *Crack the News*
from AFMS Newsletter March 2025, vol. 78 no. 2

The latest edition of Crack the News, the AFMS newsletter written by kids and teens for kids and teens, is now available at <www.juniors.amfed.org/juniors-newsletter>. In this edition, juniors from around the country wrote about wire wrapping, Petoskey stones, field trips to collect zeolites, thunder eggs, and trilobites, uraninite, obsidian, *Sacabambaspis* (a jawless fish from the Ordovician seas), and Cambrian trace fossils. It's wonderful to see the variety of rockhounding interests of the juniors in our clubs.

Reminiscences of a Mineralogist: Minerals, Localities, and Mineralogy

by Arthur Montgomery

For sale by FM-PA Chapter



First famous for specimen mining, Arthur Montgomery was later an organizer of the national Friends of Mineralogy, and was instrumental in starting The Mineralogical Record. He was a professor at Lafayette College in Easton, Pennsylvania, during which time he wrote this book, although it was not finalized and published until some years later. In fifteen chapters covering 83 pages, the author describes the start of his interest in minerals, and then traveling, collecting, and investigating minerals through his career. Chapters include bixbyite (including topaz in the Thomas Range, Utah), wulfenite (Red Cloud Mine), beryl (Harding Mine), tourmaline, diamond, mica, quartz, topaz (Thomas Range again), epidote (including Cornog, PA), zircon, olivine group, variscite (Fairfield, Utah), sterrettite, and kolbeckite.

ORDER:

Shipped to Pennsylvania addresses: \$6.00 + \$4.63
Media Mail + 0.64 PA sales tax = \$11.27

To other US addresses: \$6.00 + 4.63 Media Mail =
\$10.63

(Non-US buyers, please request a shipping quote for the cost to mail to your country: <xidg@verizon.net>)

Make checks out to "F.M., Pa. Chapter," include your postal address and send to:

David Glick, FM-PA
425 Armagast Rd
Bellefonte, PA 16823

UPCOMING EVENTS

Confirm details of events before attending.

Apr. 5 - 6, 2025: 35th Annual North Jersey Gem, Mineral & Fossil Show, by the North Jersey Mineralogical Society. Midland Park High School, 250 Prospect Street, Midland Park, NJ. Sat. 10 AM to 5 PM, Sun. 10 AM to 4 PM. <https://nojms.com/>

Apr. 26, 2025: Spring Swap-Sell, Mitchell Park / Franklin Boro Park, Cork Hill Rd, Franklin NJ

Apr. 26-27, 2025: Annual Sterling Hill Pavilion Mineral-Fossil Sale / Garage Sale, Ogdensburg NJ.

May 3-4, 2025: World of Gems-Minerals Gemstones, Jewelry, Rock Mineral-Fossil Show, by Berks Mineralogical Society. Leesport Farmers Market Banquet Hall 312 Gernant's Church Rd. Leesport, PA 19533. Sat. 10-5 Sun. 10 - 4.

June 7, 2025: Spring Mineralfest, by Pennsylvania Earth Sciences Association (PESA). Macungie Memorial Park, 50 Poplar St., Macungie PA. Free; Sat. only, 8:30 -3:00. <https://www.mineralfest.com/>

Sept. 27-28, 2025: 59th Annual Gem, Mineral & Jewelry Show, By Central Pennsylvania Rock & Mineral Club. Zembo Shrine Auditorium, 2801 N. 3rd St., Harrisburg PA 17110. Sat. 10-6,, Sun. 10-4.

FM on the WWW

Please explore the FM-PA Chapter web site:

www.rasloto.com/FM/

**And the Facebook page
(linked from the site above)**

<https://www.facebook.com/groups/1099795867347595/>

From the Editor

David Glick

THANK YOU to everyone who has been providing material for the Newsletter! Everyone else - join the fun! Feel free to contact me at xidg@verizon.net, or 814-810-2116 days and evenings. Mail can be sent to 425 Armagast Rd., Bellefonte PA 16823. Materials for the June issue should be submitted by **May 30**.

Materials related to Pennsylvania mineralogy, collecting or collectors are invited for this newsletter: articles, long or short; announcements from FM-PA committees; photographs of specimens, field localities, collections, etc.; reports on publications about PA minerals or by PA authors, or actual book reviews; or other items within the mineralogy and mineral collecting areas of interest. Photographs should be of good resolution (at least 1000 pixels across) without much JPEG compression, so that they will look good in print. Please provide captions including photographers' names.

We are producing four issues each year; your material is needed! If you know people who have interesting material, please encourage them to submit it.

National News

The Bulletin of Friends of Mineralogy, links to other chapters, and much more can be found on their web site:

www.friendsofmineralogy.org and www.facebook.com/FriendsofMineralogy/

We are a member club of EFMLS:

<https://efmls.org>
<https://www.facebook.com/efmls.org/>

Shows & Events

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

ADMINISTRATIVE DIRECTORY

official address:

Friends of Mineralogy - Pennsylvania Chapter
425 Armagast Road, Bellefonte PA 16823

OFFICERS and BOARD OF DIRECTORS members

President	Bill Stephens	bstephens@stephensenv.com	(302) 286-0406
Vice President	Dianne Soccio		
Treasurer	David Glick	xidg@verizon.net	(814) 810-2116
Secretary	Mark Sigouin		
	Mike Dunton		
	Andrew Eppig		
	William Kochanov		
	Ron Sloto		

COMMITTEE CHAIRS

Membership Chair	Dianne Soccio		
Field Trip Chair	Ross Elliott		
Web Manager	Ron Sloto		
Newsletter Editor	David Glick	xidg@verizon.net	(814) 810-2116

Members can find contact information in the Newsletter edition which they receive directly.

Friends of Mineralogy Pennsylvania Chapter Web Site: <http://www.rasloto.com/FM>

Plan **NOW** to Attend:

Friends of Mineralogy Pennsylvania Chapter and
West Chester University Earth and Space Sciences Department
2025 Symposium for Mineral Collectors
November 8 - In Person or Online
November 9 - Field Trip - Phoenixville sites

JOIN US!

The Symposium will have informative talks by knowledgeable speakers on minerals, geology and mining in Pennsylvania and beyond. This is a hybrid meeting with attendance both in person and via Zoom (Zoom registration deadline October 6). It will be a full day meeting, 8:00 a.m. - 5:00 p.m. As usual, the Symposium will include a silent auction, give-away table, and plenty of opportunities for visiting with fellow enthusiasts. The West Chester University Geology Museum will be open all day. All interested mineral collectors are invited to attend.

PROFESSIONAL GEOLOGISTS:

SIX Professional Development Hour credits available for full lecture attendance.

WEB SITE: <https://rasloto.com/FM/> will have **updates, details**, and the registration form (in the What's New section linked on the right side).

REGISTRATION:

Members \$15, Nonmembers \$20, Students free

CONTACT: e-mail: <bstephens@stephensenv.com>

PLANNED PRESENTATIONS:

- Mineral Localities of Delaware County, Pennsylvania - by Ronald A. Sloto, PG, West Chester University
- Minerals of the Phoenixville Mining District - by Ross Elliott, PG, Delaware Mineralogical Society, and Bill Stephens, PG, Stephens Environmental
- The Hogg Mine: A Tale of Two Machine Digs Revisited - by Bill Stephens, PG, Stephens Environmental
- Recent Finds in Southeastern Pennsylvania - by Anatoly Bitny
- Fossils of the C&D Canal - by Luke Jackson, West Chester University
- Importance of lead mineralogy on the historic Pennsylvania frontier - by Dr. Ryan Mathur, Juniata College

Please distribute the Symposium flyer included with this newsletter.

Annual Meeting & Elections - see p. 2



Kyanite, Darby Creek, Delaware County, PA.
Ronald A. Sloto photo



West Chester University Geology Museum will be open all day during the Symposium. *Ronald A. Sloto photo*

*Symposium, continued***Annual Meeting and Elections**

A brief annual meeting of the membership of the chapter will be part of the symposium schedule. This normally includes election of members of the Board of Directors, divided across a three-year cycle. However, we have no incumbents or candidates in this year of the three-year cycle.

Field Trip to Phoenixville Sites

President Bill Stephens reports on the Symposium field trip, Sunday, November 9:

This year we plan to visit the Phoenixville lead-zinc-copper mines (Brookdale and Southwest Chester) and expect to have a machine expose new material within a week of the event. Recent diggings have produced some finds of note at the Brookdale Mine, and we will have a self-guided tour map of the old workings for attendees. The tailgate safety meeting will be in the parking lot, and I'll lead a group to the Brookdale, for those physically challenged it's a short walk, and then take another group to the new dump dig area. These dumps are known for pyromorphite, cerussite, wulfenite, galena, and drusy quartz.

Social Media Campaign

Members and others! Friend President Bill Stephens on facebook for regular updates on FM National, FM-PA and all FM Chapters including Symposia and Events. We want to get the word out to everyone! The first big event in this campaign is our Chapter's November Symposium.



Celestine, Meckley's Quarry ("old side"), Mandata, PA. Crystals ~ 5mm. D. Glick photo

Glick to be voting rep to FM National

Chapter president Bill Stephens has noted: "Since I have become President of National, we are underrepresented at National as a Chapter in important votes because I cannot vote twice." He therefore moved to appoint treasurer David Glick, and the Board approved, as the voting representative for FM-PA in FM National matters, as long as Bill is National president.

Editor's Note on Schedule

by David Glick

Readers, please accept my apology for the major slippage in the schedule of this newsletter, with what should have been the June issue coming out in September (we're calling it the "summer" issue).

We will get caught up, with another issue coming out well before the November Symposium with final details (please submit items by October 10). Thank you for your understanding.

President's Message

June, 2025

from

Bill Stephens, PG,
President:

**Friends of Mineralogy -
Pennsylvania Chapter
(FM-PA) [2020-present]**

**Friends of Mineralogy
National [2024-present]**



Hello everyone! The Board has been pretty quiet this second quarter. Everything remains 5 x 5, and I'm sure everyone is enjoying their summer so far. I have been extremely busy and have not had much opportunity to work on FM things, but we have begun to edit the operating regulations and Tama Higuchi has submitted some alternative designs for a new logo for the Board to consider and comment on as necessary. I suspect we will have the draft operating regulations revised by the fourth quarter and perhaps the new logo as well. [September update: the new logo has been approved and will be unveiled very soon.]

I must say yesterday (Friday June 27) was the first day in months I have come up for air. We completed and submitted 2 urban infill residential subdivision Concept Plans, 4 Forest Stand Delineations, a huge boundary survey of marshland and upland in Wicomico County, Maryland for the USFWS Conservation Easement to be added to Blackwater Wildlife Refuge's easements, Sewer connection plan, sundry wetland delineations, grading and stormwater plans for small developments not to mention significant yard work. Now we have some less urgent projects to work on and I'll find some time to do some collecting and get the ops regs ready for board review and consideration.

I am working on some private field trip/machine dig opportunities as well as planning a field trip event for Tucson. Stay tuned and look for more articles on various topics as the year progresses.

Also, please read my article in the June FM National Newsletter on **Kentucky Geode** field collecting with the Kanawha Club back in May. It was a great trip and the club had a great time. I drove 10 hours down to Danville KY area to hang with one of my EFMLS Region 5 clubs I have never met in 6 years or been able to communicate effectively with as their Region 5 RVP. Some of you may recall I am the immediate past President of the Eastern Federation of Mineralogical and Lapidary Societies, Inc. and I still have Region 4 (MD, DC, DE, VA) in my area of direct communication responsibility. Members of EFMLS organizations are also members of our FM Chapters. As we look forward to the next National Symposium, which will be Hybrid, part of my marketing strategy for FM National and our chapters is to inform and engage with these larger organizations to generate interest more broadly in our symposium and activities.

I also would like to mention that I am planning an open house for mineral sales at my home sometime in mid-July or August and will make an announcement when that date becomes fixed. If you are interested in coming by email or message me on Facebook.

Don't forget the show and symposium theme is red white and blue minerals in celebration of the US 250th anniversary. Also, if your chapter would like a presentation via zoom, I have a dozen topics already in the bag and I am happy to provide one you select. Three have been given at past National and all have been given at PA Chapter symposia.

All for now. Stay Tuned!

Sincerely,

Bill Stephens, PG, President

FM-PA & FM National

CALL For ARTICLES

If you are interested in contributing an article to the National or PA Chapter newsletter, contact our National Newsletter Editor Sean Stimac (articles only) or David Glick for our PA Chapter Newsletter. ?

Be sure to look me up if you are in town. Till then, stay safe, stay tuned and happy hunting!

EFMLS / AFMS Federation News

FM-PA Chapter is a member of EFMLS, the Eastern Federation of Mineralogical and Lapidary Societies, and therefore an affiliate of AFMS, the American Federation of Mineralogical Societies. We encourage our readers to read the monthly newsletters available on their web sites.

The AFMS <<https://www.amfed.org/newsletter>> April newsletter has lots of interesting items, as usual. Public relations, including online platforms useful for nonprofits, are discussed. The safety article discusses how a variety of factors can contribute to an accident or safety incident. Rockhounds of the Year from several clubs are presented. The history article covers Baltimore Mineral Society's Micromount Symposium, specifically the 11th one in 1967. There's news on juniors programs; see page 4 about the latest *Crack the News* issue. Cheryl Neary's article takes us on a trip starting in the Appalachians, site of this year's AFMS Convention in March in North Carolina, heading for next year's, in St. Charles, Illinois, May 23-24, 2026. 2025 Bulletin Editors Contest results are presented.

The May newsletter begins with President JC Moore's report on the AFMS/EFMLS Convention in North Carolina, and AFMS business and decisions made there. AFMS will transition their newsletter to an all-electronic version in the coming year. Public Relations Chair Jim Brace-Thompson continues his series of articles. Dinosaur trackway and stromatolite articles from club newsletters are reprinted.

The June newsletter begins with President JC Moore's report on his travels to federation shows, and encouraging clubs to have strong kids' programs. AFMS will transition their newsletter to an all-electronic version. Public Relations Chair Jim Brace-Thompson notes many activities which could be publicized by clubs. The safety article covers a real incident of long hair getting caught in rotary machinery (no permanent injuries). Minutes of the AFMS 2025 Annual Meeting are presented. An article on "Turitella Agate" is reprinted; it notes that it's neither *Turitella* marine snails, nor is it agate (it's not banded), but is an interesting and popular material.

The Eastern Federation's <<https://efmls.org/>> April Newsletter includes president Andrew "Rockhound's" report on the recent EFMLS/AFMS Convention in North Carolina, reprinted on page 3. The EFMLS Wildacres Workshop in Little Switzerland, North Carolina, is May 12-18; see www.efmls.org/wildacres

The May Newsletter includes president Andrew “Rockhound’s” report, which mentions the Future Rockhounds of America badge program and the juniors “crack the News” newsletter. He is working on a “Day as EFMLS President at the Convention” Dirtman Report. An article describes interesting Omarolluk Formation greywacke pebbles with voids left by weathering of calcareous inclusions, found throughout glaciated Great Lakes areas. The annual Treasurer’s Report is shown.

The June Newsletter includes president Andrew “Rockhound’s” column, which includes the news, “We are looking to start holding special Zoom meetings for each Region, where clubs can attend to learn more about the EFMLS offerings, meet your Region VP, ask questions or even advise us of issues, so that all our clubs can come together and grow as an organization.” New Wildacres Chair Helen Serras-Herman provides a detailed, illustrated article of what happens at Wildacres, reviewing the May session.

The Eastern Federation’s September Newsletter includes president Andrew “Rockhound’s” column, including the news:

“I would like to announce that Renee Kowalchik has joined our team! I have appointed her to fill the “Youth Coordinator” position. Earlier this year our youth coordinator Darryl Powell had to step away, called back to Pastor his church, with the current Pastor leaving. We wish him all the best and thank him for service to the EFMLS. Renee is an AFMS/EFMLS award winning newsletter editor for the Central PA Rock & Mineral Club, and has shown her dedication to youth outreach with monthly club newsletter highlights on the various badges offered to all club youth members through the AFMS Junior Rockhounds program (<https://www.juniors.amfed.org/>). She is eager and excited to continue at the EFMLS level to share and coordinate youth programs across all our clubs! Welcome Renee!

As we move into fall and club trips, events and shows are in full swing, send us your pics and highlights to share with the rest of the EFMLS through our social media and newsletter. We want to see them! It is a great opportunity to show how fun your club is, and attract new members. Have a wonderful and safe September everyone!

Ellery Borow gives the full story on the Club Rockhound of the Year (CROY) program. The safety article notes that safety concerns occur in just about every field.

-Editor

Crack the News:

The AFMS Newsletter for Kids & Teens

by Dennis Gertenbach, Editor, Crack the News

from AFMS Newsletter April 2025, vol. 78 no. 3

A new edition of *Crack the News*, the AFMS newsletter written by kids and teens for kids and teens, was introduced at the AFMS Convention in Hickory, North Carolina, this spring. It’s now available at <https://www.juniors.amfed.org/juniors-newsletter>. In this edition, juniors from around the country wrote about gold panning in California, hunting for pyrite in Oregon, and collecting Mazon Creek fossils in Illinois. They also wrote about their favorite rocks and minerals, including pyrite, dyed agate, and K2. (Yes, there’s a rock named after the second highest mountain on Earth.) Plus, you can read about Tully Monsters. It’s wonderful to see the variety of rockhounding interests our juniors have.

Another well-illustrated edition came out in July, also available on the web site. It covers many topics, including consequences of disturbing nature; the fossil mammal *Andrewsarchus*; ammonites and nautilus; poetry; fluorescence; lapis lazuli; coquina; the Chalk emerald at the Smithsonian; making cabochons; the Rosser Reeves star ruby; and the Logan sapphire at the Smithsonian.

50 Years Ago: PA Mineral Symposium

Friends of Mineralogy, Region 3 -- Fall Edition 1975

The third annual ‘Pennsylvania Mineral Symposium’ will be held at West Chester State College, West Chester, Pennsylvania, October 31, Nov. 1 and 2, 1975. The 1975 Symposium theme will be Metamorphic Rocks of Pennsylvania. The theme will be followed by various topics relative to collecting localities and their minerals. The Symposium will have as its featured speaker Mr. Neal Yedlin, New Haven, Conn., a well known personality in the field of Mineralogy. Mr. Yedlin has been very active in all phases of mineral collecting. An author and writer in *Rocks and Minerals* as well as the *Mineralogical Record*, he is well known for his ingenious and skillful methods employed in micro mounting.

Mr. Neal Yedlin's topic for the Symposium will be "micro mounting and its relationship to Pennsylvania mineral collectors of yesterday". We will hear more about Henry Garrett, Dr. J.C. Green, Geo. English and Geo. Ashby, men who in the late 1800 were active in accumulating micro minerals of fine quality. It will be a great opportunity to learn about micro mineral collecting and mounting.

The Symposium will begin Friday evening with a workshop on Metamorphic rocks, followed by a social hour and the exchange of mineral specimens.

The laboratory facilities, scopes, X-ray and assistance in visual identification will be available throughout the meeting.

From newsletter on the FM-PA web site

Fluorescence and Phosphorescence of Wavellite from National Limestone Quarry #2, Snyder County, Pennsylvania

by Calvin Harris

FM-Midwest Chapter

Introduction

Currently, only basic descriptions regarding the fluorescence and phosphorescence of wavellite, $\text{Al}_3(\text{PO}_4)_2(\text{OH},\text{F})_3 \cdot 5\text{H}_2\text{O}$, from National Limestone Quarry #2 property are available. This is particularly evident considering the development of mid-wave and different longwave wavelengths that are readily available. Describing the fluorescence and phosphorescence of wavellite caused by shortwave (254nm), mid-wave (312nm), longwave (351nm) and longwave (370nm) wavelengths helps to alleviate this deficiency. Fourteen wavellite specimens will be evaluated.

Site Setting

National Limestone Quarry #2 is located on the north side of Lime Ridge and some 0.5 miles WNW of Mount Pleasant Mills in Snyder County, Pennsylvania. The wavellite collecting area is on the property but just over the crest of Lime Ridge on its south side. It consists of sandstone in the Ridgeley member of the Devonian Old Port Formation. It is also a source of fossils such as trilobites, crinoids and gastropods. Fluorescent minerals from the limestone quarry itself were described in the previous newsletter issue.

Mineral Description

The wavellite consists largely of yellow-green, spherulitic masses of various stages of development. Also, there are yellow-green circular, radiating, fibrous crystal forms. Generally, the wavellite measures between 1mm-16mm and is found as crusts perched on tan colored sandstone matrices of various sizes.

All of the specimens are part of my study collection of fluorescent minerals and were purchased through internet sales from a geologist familiar with the collection site.

Test Procedures

The test procedures allow collectors to carefully observe fluorescence and phosphorescence in the field and under controlled conditions. The procedures are repeatable and provide meaningful results. Ultraviolet lamps, manufactured by UVSYSTEMS, INC., based in Renton, Washington were placed 3-4 inches from the specimens to observe fluorescence and 2-3 inches to observe phosphorescence; a 10-second exposure time was adequate for evaluation. A DC electric source was used to operate the lamps.

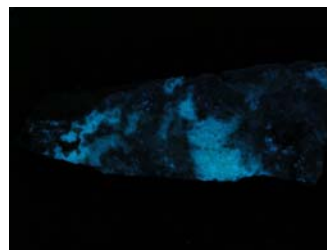
Results

Specimen A ch2024258fl

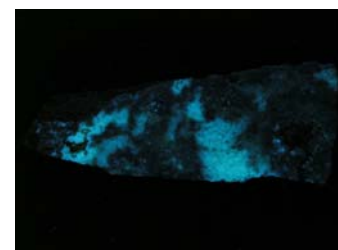
Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Low intensity, blue-green color.	Weak intensity, lime-green color, 4-second duration.
Mid-wave (312nm)	Moderate-low intensity, green-blue color.	Similar to Shortwave (254nm), except slightly brighter, 5-second duration.
Longwave (351nm)	Similar to Mid-wave (312nm).	Similar to Shortwave (254nm), except 3-second duration.
Longwave (370nm)	Moderate-bright intensity, green-blue color.	Low intensity, green-blue color, 4-second duration.



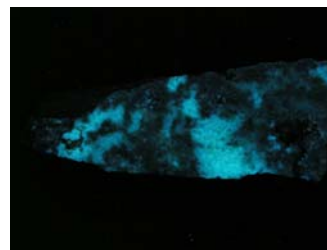
Specimen A, daylight



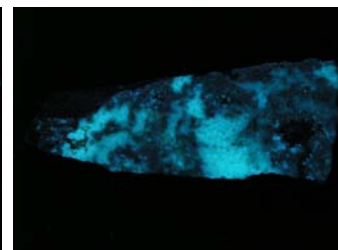
Spec. A, shortwave 254nm



Spec. A, mid-wave 312nm



Spec. A, longwave 351nm



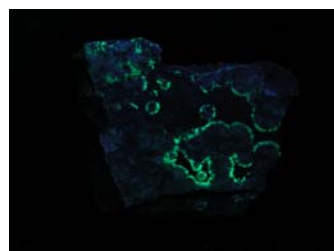
Spec. A, longwave 370nm

Specimen B ch2024265fl

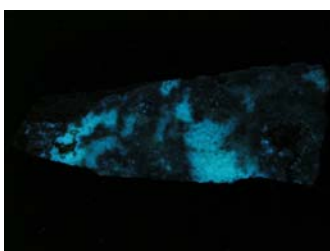
Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate intensity, emerald-green color on edges of crystals.	No reaction.
Mid-wave (312nm)	Similar to Shortwave (254nm), except moderate-low intensity.	No reaction.
Longwave (351nm)	Similar to Mid-wave (312nm), except low intensity.	No reaction.
Longwave (370nm)	Similar to longwave (351nm), except slightly brighter.	No reaction.



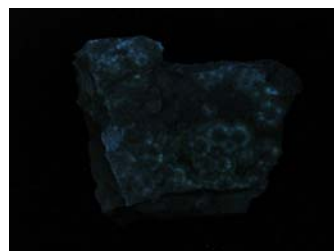
Specimen B, daylight



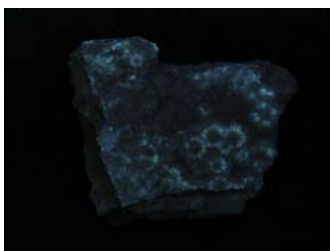
Spec. B, shortwave 254nm



Spec. B, mid-wave 312nm



Spec. B, longwave 351nm



Spec. B, longwave 370nm

Specimen C ch2024257fl

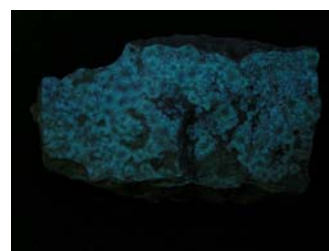
Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Low intensity, blue-green color.	Very low intensity, blue-green color, 4-second duration.
Mid-wave (312nm)	Moderate-low intensity, blue-green color.	Moderate intensity, blue-green color, 5-second duration.
Longwave (351nm)	Moderate intensity, blue-green color.	Very low intensity, blue-green color, 3-second duration.
Longwave (370nm)	Moderate-bright intensity.	Moderate-low intensity, blue-green color, 3-second duration.

Specimen D ch2024263fl

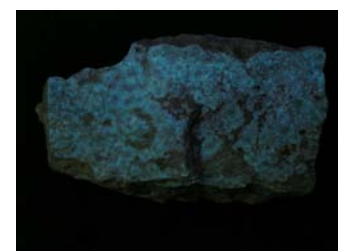
Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-low intensity, blue-green color.	Moderate intensity, blue-green color, 5-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm).	Moderate-bright intensity, white with green tint, 7-second duration.
Longwave (351nm)	Moderate intensity, blue-green color.	Moderate intensity, blue-green color, 5-second duration.
Longwave (370nm)	Moderate-bright intensity, blue-green color.	Moderate-low intensity, blue-green color, 3-second duration.



Specimen D, daylight



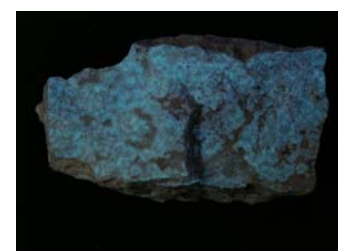
Spec. D, shortwave 254nm



Spec. D, mid-wave 312nm



Spec. D, longwave 351nm



Spec. D, longwave 370nm

Specimen E ch2024261fl

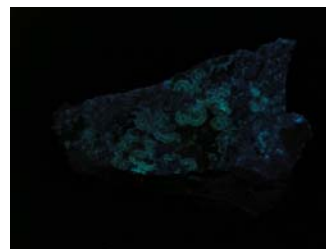
Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Low intensity, blue-green color.	Extremely low intensity, blue-green color, 2-second duration.
Mid-wave (312nm)	Low intensity, blue-green color.	Low intensity, blue-green color, 3-second duration.
Longwave (351nm)	Moderate intensity, blue-green color.	Very low intensity, blue-green color, 3-second duration.
Longwave (370nm)	Similar to Longwave (351nm), except slightly brighter.	Moderate-low intensity, white with blue tint, 3-second duration.

Specimen F ch2024266fl

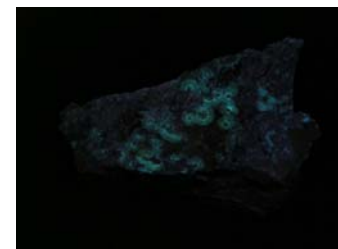
Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Low intensity, emerald-green color.	No reaction.
Mid-wave (312nm)	Moderate-low intensity, emerald-green color.	Extremely-low intensity, color, duration indeterminant.
Longwave (351nm)	Similar to Shortwave (254nm).	Same as Mid-wave (312nm).
Longwave (370nm)	Same as Mid-wave (312nm).	Same as Mid-wave (312nm), except 2-second duration.



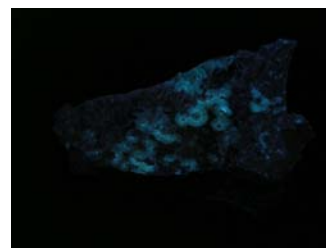
Specimen I, daylight



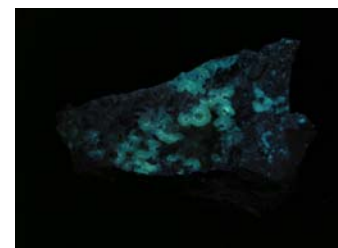
Spec. I, shortwave 254nm



Spec. I, mid-wave 312nm



Spec. I, longwave 351nm



Spec. I, longwave 370nm

Specimen G ch2024256fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-low intensity, emerald-green color, most notable on edges of crystals,	No reaction.
Mid-wave (312nm)	Low intensity, muted emerald-green color.	No discernable reaction.
Longwave (351nm)	Very-low intensity, muted emerald-green color.	Same as Mid-wave (312nm).
Longwave (370nm)	Same as Longwave (351nm).	Same as Shortwave (254nm).

Specimen H ch2024259fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Low intensity, blue-green color.	No reaction.
Mid-wave (312nm)	Moderate-low intensity, blue-green color.	Extremely-low intensity, color indeterminant, 1-second duration.
Longwave (351nm)	Moderate intensity, blue-green color.	Similar to Mid-wave (312nm), except 2-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Very-low intensity, blue-green color, 2-second duration.

Specimen J ch2024264fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Low intensity, blue-green color.	Very-low intensity, blue-green color, 2-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm).	Low intensity, gray-white color, 3-second duration.
Longwave (351nm)	Moderate-low intensity, blue-green color.	Similar to Shortwave (254nm).
Longwave (370nm)	Moderate-low intensity, blue-green color.	Low intensity, white color, 3-second duration.

Specimen I ch2024262fl

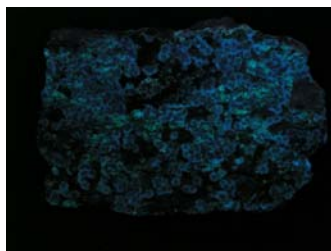
Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Low intensity, emerald-green color.	Extremely-low intensity, white color, 2-second duration.
Mid-wave (312nm)	Moderate-low intensity, emerald-green color.	Similar to Shortwave (254nm).
Longwave (351nm)	Similar to Mid-wave (312nm).	Similar to Shortwave (254nm).
Longwave (370nm)	Moderate-bright intensity, emerald-green color.	Similar to Shortwave (254nm).

Specimen K ch2024273fl

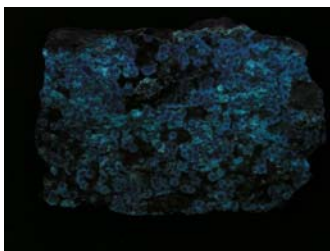
Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-low intensity, blue-green, prominent on crystal edges.	Very-low intensity, blue-green color, 3-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm), except slightly brighter.	Slightly brighter than Shortwave (254nm), sky-blue color, 4-second duration.
Longwave (351nm)	Moderate intensity, blue-green color.	Extremely-low intensity, gray color, 2-second duration.
Longwave (370nm)	Moderate-bright intensity, blue-green color.	Similar to Longwave (351nm).



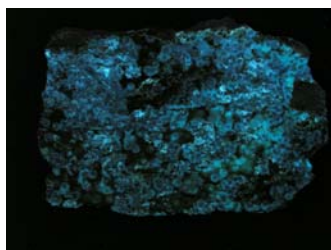
Specimen K, daylight



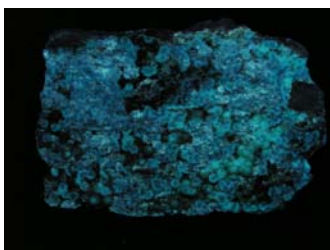
Spec. K, shortwave 254nm



Spec. K, mid-wave 312nm



Spec. K, longwave 351nm



Spec. K, longwave 370nm

Specimen L ch2024260fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-low intensity, blue-green color.	Intensity, color indeterminable, 1-second duration.
Mid-wave (312nm)	Moderate intensity, blue-green color.	Low intensity, white with blue tint, 3-second duration.
Longwave (351nm)	Moderate-bright intensity, blue-green color.	Similar to Shortwave (254nm).
Longwave (370nm)	Similar to Longwave (351nm).	Very-low intensity, blue-gray color, 2-second duration.

Specimen M ch2024248fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate intensity, blue-green color.	Moderate intensity, green-blue color, 4-second duration.
Mid-wave (312nm)	Moderate-bright intensity, blue-green color.	Moderate-bright intensity, green-blue color, 5-second duration.
Longwave (351nm)	Similar to Mid-wave (312nm).	Moderate-low intensity, white color, 4-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Moderate intensity, white color, 4-second duration.

Specimen N ch2024246fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-low intensity, blue-green color.	Very-low intensity, blue-green color, 2-second duration.
Mid-wave (312nm)	Moderate intensity, blue-green color.	Low-intensity, blue-green color, 3-second duration.
Longwave (351nm)	Similar to Mid-wave (312nm).	Low intensity, blue-green color, 3-second duration.
Longwave (370nm)	Similar to Mid-wave (312nm).	Similar to Mid-wave (312nm).

Observations and Notes

Longer wavelengths consistently produced more vivid results compared to other wavelengths. Fluorescent colors varied from blue-green to emerald-green. All of the specimens exhibited fluorescence; most specimens exhibited low intensity responses. The color may be due to trace quantities of the uranyl radical (UO_2)⁺². The low intensity may be caused by trace quantities of ferric (Fe^{+3}) iron ions, which can act as a fluorescent quencher or activator.

Phosphorescent colors varied; blue-green, white, white with green tint were observed. There was one specimen that did not display phosphorescence. Currently, the activators that cause the phosphorescence have not been determined.

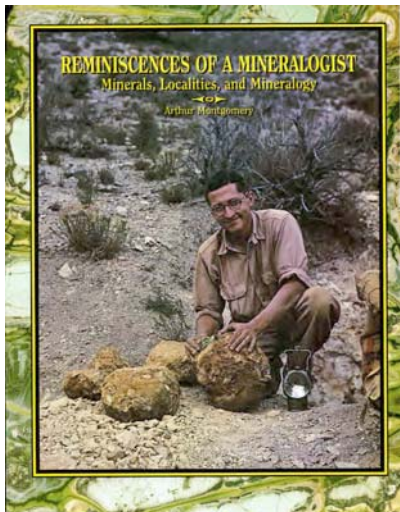
The mineral collector may find these results beneficial because they can explore an aspect of their collection not considered. Any discovery would add value to their collection by the additional knowledge gained and enlivened interest.

SELECTED REFERENCES

- Barmarin, Gérard, 2010, *Wavellite: Atlas of Luminescent Minerals*, Spectral Data: <http://www.fluomin.org> (accessed June 25, 2025).
- Harris, Calvin, 2025, *Fluorescent Calcite and Strontianite from National Limestone Quarry #2, Snyder County, Pennsylvania: Friends of Mineralogy Pennsylvania Chapter Newsletter*, 53(1), p. 6-10.
- Hurlbut, Cornelius S., Jr., and Sharp, W. Edwin, 1998, *Dana's Minerals and How to Study Them*, 4th Ed.: John Wiley and Sons, Inc, New York, 218 p.
- Robbins, Manuel A., 1983, *The Collector's Book of Fluorescent Minerals*: New York, Van Nostrand Reinhold Company, Inc., 289 p.
- Pough, Fredrick H., 1960. *A Field Guide to Rocks and Minerals*: Houghton Mifflin Company, Boston, p. 220-221.
- Sloto, Ronald A., 2022, *Phosphate Minerals from Lime Ridge, Snyder County, Pennsylvania: The Mineralogical Record*, 53(5), p. 649-656.

Reminiscences of a Mineralogist: Minerals, Localities, and Mineralogy

by Arthur Montgomery



For sale by FM-PA Chapter

First famous for specimen mining, Arthur Montgomery was later an organizer of the national Friends of Mineralogy, and was instrumental in starting The Mineralogical Record. He was a professor at Lafayette College in Easton, Pennsylvania, during which time he wrote this book, although it was not finalized and published until some years later. In fifteen chapters covering 83 pages, the author describes the start of his interest in minerals, and then traveling, collecting, and investigating minerals through his career. Chapters include bixbyite (including topaz in the Thomas Range, Utah), wulfenite (Red Cloud Mine), beryl (Harding Mine), tourmaline, diamond, mica, quartz, topaz (Thomas Range again), epidote (including Cornog, PA), zircon, olivine group, variscite (Fairfield, Utah), sterrettite, and kolbeckite.

ORDER:

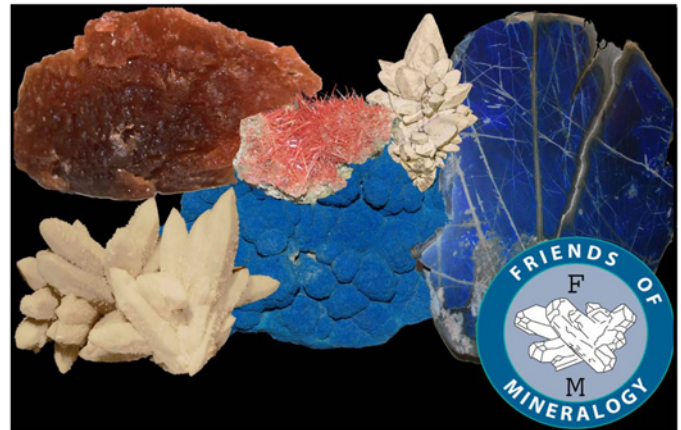
Shipped to Pennsylvania addresses: \$6.00 + \$4.63
Media Mail + 0.64 PA sales tax = \$11.27

To other US addresses: \$6.00 + 4.63 Media Mail =
\$10.63

(Non-US buyers, please request a shipping quote
for the cost to mail to your country:
<xidg@verizon.net>)

Make checks out to "F.M., Pa. Chapter," include your
postal address and send to:

David Glick, FM-PA
425 Armagast Rd
Bellefonte, PA 16823



Friends of Mineralogy in conjunction with the
Mineralogical Society of America and the Tucson
Gem & Mineral Society® is pleased to announce the
44th Annual Tucson Mineral Symposium.

Red, White, and Blue
- Celebrate the Spirit of Minerals

Saturday, February 14, 2026



**FM-TGMS-MSA Tucson Mineral
Symposium:
Red, White and Blue
- Celebrate the Spirit of Minerals
Saturday, February 14, 2026
Tucson Convention Center, Tucson, AZ**

From Bulletin of FM 55:2 June 2025

The forty-fourth Mineral Symposium, held in conjunction with the Tucson Gem and Mineral Show®, will take place on Saturday, February 14, 2026. This symposium is co-sponsored by the Tucson Gem and Mineral Society®, the Friends of Mineralogy, and the Mineralogical Society of America. As a tie in with the show, the symposium theme is a modified form of the show theme: "Red White and Blue, Celebrate the Spirit of Minerals."

Presentations are expected on red, white or blue minerals – worldwide localities, geology, mineralogy, crystallography, cause of color, or geochemistry. Some examples of topics are rhodochrosite, rhodonite, rubies, red beryl, azurite, aquamarine, and linarite.

UPCOMING EVENTS

Confirm details of events before attending.

Sept. 27-28, 2025: 59th Annual Gem, Mineral & Jewelry Show, By Central Pennsylvania Rock & Mineral Club. Zembo Shrine Auditorium, 2801 N. 3rd St., Harrisburg PA 17110. Sat. 10-6, Sun. 10-4.

Oct. 4, 2025: Fall Mineralfest, by Penna. Earth Sciences Assoc. Macungie Memorial Park, 50 N. Poplar St., Macungie, PA 18062. Sat. only, 8:30 - 3:00. <https://www.mineralfest.com/>

Oct. 17-19, 2025: 69th Paul Desautels Memorial Micromount Symposium, by The Baltimore Mineral Society. Natural History Society of Maryland, 6908 Belair Rd., Baltimore MD 21206. For information contact mseeds@fandm.edu

Oct. 25, 2025: 35th Ultraviolation, fluorescent minerals-only show and sale. First United Methodist Church, 840 Trenton Rd., Fairless Hills PA 19030. Sat. only, 9-4. www.facebook.com/ultraviolation/

Nov. 1 - 2, 2025: Gemarama Annual Show, by Tuscarora Lapidary Society. Greater Philadelphia Expo Center, 100 Station Avenue, Oaks, PA. Saturday 10-6 / Sunday 10-5. <https://www.lapidary.org/gemarama/>

Nov. 8 - 9, 2025: Annual Symposium & Field Trip, by Friends of Mineralogy - PA Chapter. See p. 1 and <https://rasloto.com/FM/>

FM on the WWW

Please explore the FM-PA Chapter web site:

www.rasloto.com/FM/

And the Facebook page
(linked from the site above)

<https://www.facebook.com/groups/1099795867347595/>

From the Editor

David Glick

THANK YOU to everyone who has been providing material for the Newsletter! Everyone else - join the fun! Feel free to contact me at xidg@verizon.net, or 814-810-2116 days and evenings. Mail can be sent to 425 Armagast Rd., Bellefonte PA 16823. Materials for the fall issue should be submitted by **October 10**.

Materials related to Pennsylvania mineralogy, collecting or collectors are invited for this newsletter: articles, long or short; announcements from FM-PA committees; photographs of specimens, field localities, collections, etc.; reports on publications about PA minerals or by PA authors, or actual book reviews; or other items within the mineralogy and mineral collecting areas of interest. Photographs should be of good resolution (at least 1000 pixels across) without much JPEG compression, so that they will look good in print. Please provide captions including photographers' names.

We are producing four issues each year; your material is needed! If you know people who have interesting material, please encourage them to submit it.

National News

The Bulletin of Friends of Mineralogy, links to other chapters, and much more can be found on their web site:

www.friendsofmineralogy.org and
www.facebook.com/FriendsofMineralogy/

We are a member club of EFMLS:

<https://efmls.org>

<https://www.facebook.com/efmls.org/>

Shows & Events

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

ADMINISTRATIVE DIRECTORY

official address:

Friends of Mineralogy - Pennsylvania Chapter
425 Armagast Road, Bellefonte PA 16823

OFFICERS and BOARD OF DIRECTORS members

President	Bill Stephens	bstephens@stephensenv.com	(302) 286-0406
Vice President	Dianne Soccio		
Treasurer	David Glick	xidg@verizon.net	(814) 810-2116
Secretary	Mark Sigouin		
	Mike Dunton		
	Andrew Eppig		
	William Kochanov		
	Ron Sloto		

COMMITTEE CHAIRS

Membership Chair	Dianne Soccio
Field Trip Chair	Ross Elliott
Web Manager	Ron Sloto
Newsletter Editor	David Glick

xidg@verizon.net

(814) 810-2116

Friends of Mineralogy Pennsylvania Chapter Web Site: <http://www.rasloto.com/FM>

Members can find contact information
in the Newsletter edition which they
receive directly.

Only TWO WEEKS until:

Friends of Mineralogy Pennsylvania Chapter and West Chester University Earth and Space Sciences Department

2025 Symposium for Mineral Collectors **November 8 - In Person or Online** **November 9 - Field Trip - Phoenixville sites**

JOIN US!

The Symposium will have informative talks by knowledgeable speakers on minerals, geology and mining in Pennsylvania and beyond. This is a hybrid meeting with attendance both in person and via Zoom (Zoom registration deadline November 6). It will be a full day meeting, 8:00 a.m. - 5:00 p.m. As usual, the Symposium will include morning refreshments, a silent auction, give-away table, and plenty of opportunities for visiting with fellow enthusiasts. Lunch is available nearby. The West Chester University Geology Museum and the Interactive Periodic Table are down the hall and will be open all day.

All interested mineral collectors are invited to attend. We weren't able to fill our schedule with talks on the Red, White, and Blue Minerals theme which we originally advertised, but several of the presentations will cover such minerals or colonial / revolutionary connections pertinent to the United States' 250th anniversary.

PROFESSIONAL GEOLOGISTS:

SIX Professional Development Hour credits available for full lecture attendance.

WEB SITE: <https://rasloto.com/FM/>

will have **updates, details**, and the registration form (in the What's New section linked on the right side).



West Chester University Geology Museum will be open during the Symposium. *R. A. Sloto photo*

REGISTRATION:

Members \$15, Nonmembers \$20, Students free

Zoom registration deadline Nov. 6

On-site registration is possible (cash or check payment only), but **advance registration is encouraged** for everyone as it helps us plan.

PLANNED PRESENTATIONS:

- Famous Mineral Localities of Delaware County, Pennsylvania - by Ronald A. Sloto, PG, West Chester University
- The Hogg Mine: A Tale of Two Machine Digs Revisited - by Bill Stephens, PG, Stephens Environmental
- Importance of lead mineralogy on the historic Pennsylvania frontier - by Dr. Ryan Mathur, Juniata College
- Fossils of the C&D Canal - by Luke Jackson, West Chester University
- Recent Finds in Southeastern Pennsylvania - by Anatoly Bitny
- Minerals of the Phoenixville Mining District - by Ross Elliott, PG, Delaware Mineralogical Soc., and Bill Stephens, PG, Stephens Environmental

SILENT AUCTION & GIVEAWAYS

The silent auction and giveaway table are long-time favorites at our Symposia. The auction raises funds for our Chapter, and both find new homes for specimens, books, and equipment. A **donation or two** - or more - are greatly appreciated, not only by the Chapter but also by their new owners. Please bring donations to room MER-109 when you arrive in the morning.

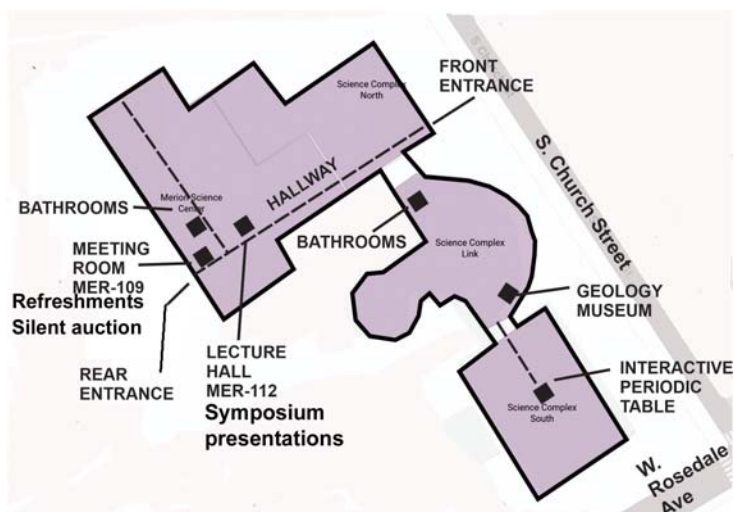
Annual Meeting & Elections – Field Trip
see page 2

Symposium, continued

Annual Meeting and Elections

A brief annual meeting of the membership of the chapter will be part of the symposium schedule. This normally includes election of members of the Board of Directors, divided across a three-year cycle. However, we have no incumbents or candidates in this year of the three-year cycle.

SCIENCE CENTER MAP



Field Trip to Phoenixville Sites

President Bill Stephens reports on the Symposium field trip, Sunday, November 9:

This year we plan to visit the Phoenixville lead-zinc-copper mines (Brookdale and Southwest Chester) and expect to have a **machine expose new material** within a week of the event. Recent diggings have produced some finds of note at the Brookdale Mine, and we will have a self-guided tour map of the old workings for attendees. The tailgate safety meeting will be in the parking lot - please **ARRIVE BY 10:00 a.m.** All must provide cell # and email on the **SIGN IN SHEET** at my truck. All must wear high-visibility safety vests, and remember that golfers have the right-of-way; stay off the greens! I'll lead a group to the Brookdale, for those physically challenged it's a short walk, and then take another group to the new dump dig area. These dumps are known for pyromorphite, cerussite, wulfenite, galena, and drusy quartz.

Social Media Campaign

Members and others! Friend President Bill Stephens on Facebook for regular updates on FM National, FM-PA and all FM Chapters including Symposia and Events. We want to get the word out to everyone! The first big event in this campaign is our Chapter's November Symposium.

CONTACT: e-mail: <bstephens@stephensenv.com>

WEST CHESTER UNIVERSITY PARKING



Street parking on Saturday FREE UNTIL 5:00 PM - PAY via kiosk or app after 5:00.

President's Message

**Updated
October 18, 2025**

from
Bill Stephens, PG,
President:

**Friends of Mineralogy -
Pennsylvania Chapter
(FM-PA) [2020-present]**

**Friends of Mineralogy
National [2024-present]**



Hello everyone! The FM National Board has been pretty busy this summer and early fall. Lots of great news and developments. Here's some highlights and updates of those activities prior and subsequent to our Sunday September 14 Board meeting, which I'll enumerate separately:

- The newly revised Operations Manual has been updated and adopted by the Board! We had been working on that off and on apparently since 2016, before I was even on the Board. It now includes a new section on social media rules and regs. It will be on the website soon.
- The Board has voted to remove any reference to California, California's state seal etc., and has removed Article 1 Section 2 in its entirety. The revisions to the Bylaws were adopted by vote of the Board of Directors. The revised Bylaws should be up on the website now.
- The Board of Directors has voted to move the Corporation to Arizona, and we are working on that process. I took a look at the regulations for incorporating in AZ and it was pretty ominous. I reached out to Graham Sutton to see if there was anyone he could recommend since we were grasping at straws and frankly taken aback by the sheer volume of regulations. Graham recommended and put me in contact with Paul Harter, an Arizona attorney and mineral collector. Paul has agreed to take on the task pro bono, and I have been keeping in touch with him as the research into the best approach progresses. Stay tuned, this will take time and will be an arduous task. I do not anticipate it will be completed this year or before the annual meeting.
- The new Logo has been adopted for FM National, unanimously I might add with 13 ayes and no nays, several directors not responding within the allocated time frame. We owe Tama Higuchi a debt of gratitude for her efforts. See the newsletter and website for the new logo. I'm using it in my emails now.
- Mark Jacobson, our National Symposium Chair and immediate Past President, has all of our speakers in place/ committed and their subject titles and abstracts. Visit the FM National website for more information on the speakers, topics and times for the February 14, 2026, Symposium. The theme this year is Red, White & Blue Minerals in celebration of the US 250th Anniversary.
- Mark has assembled 4 boxes of FM National archives and more recently inquired with the University of Arizona to see if they would be willing to curate them. We received a "no thank you" from University of AZ. On to the next option. No action will be taken without Board authorization, but it's important we find a home for these documents unless someone is willing to take on the responsibility of scanning them first.
- The PA Chapter Symposium will be at West Chester University this year, Saturday November 8, 2025. The symposium will be fully hybrid and if you cannot attend in person you can register in advance on the web. Whether you attend the symposium in person or remotely, you can still attend the field trip on Sunday, November 9 from 9am to 4pm. This year we plan to visit the Phoenixville lead-zinc-copper mines and expect to have a machine expose new material within a week of the event. Recent diggings have produced some finds of note at the Brookdale Mine, and we will have a self-guided tour map of the old workings for attendees. The tailgate safety meeting will be in the parking lot, and I'll lead a group to the Brookdale, for those physically challenged it's a short walk, and then take another group to the new dump dig area.
- There are rumblings of interest in setting up a Southeast Chapter. I expect to be speaking with those who have expressed interest to me

directly, and also to the Tellus Museum in Cartersville, GA as a possible host and/or affiliate. I understand there was a Southeast Chapter at one time, but have no other information at this time. Interested parties should contact me directly.

FIELD TRIPS NEXT YEAR!

I am working on some private field trip/machine dig opportunities as well as planning a field trip event for Tucson. I'm in discussions with the operator of the Hogg Mine in LaGrange GA for a spring machine dig to be sponsored by FM National and open to members of FM National and its chapters, and the Young Mineral Collectors. I suspect the Hogg Mine Trip will be held around the end of April on a weekend and last 2-3 days. I'm also in discussions with the owner of Treasure Mountain in the Herkimer District, Little Falls NY about a machine/power tool dig at Treasure Mountain for the summer. Stay tuned and look for more articles on various topics as the year ends and we start planning for next year.

2026 ANNUAL SYMPOSIUM GOES HYBRID!

The FM National Board has opted to run our National Annual Symposium hybrid for the first time this coming February 14, 2026. The presentations, and other information will be live-streamed via Zoom for remote attendees. We are excited to be able to live-stream the symposium this year for a nominal fee, as it is the 250th anniversary of the US independence, with our focus on the Tucson Gem and Mineral Show (TGMS) theme of Red White and Blue Minerals, in honor of this anniversary. We will ask remote attendees to register on line on our website no later than Thursday, February 12, 2026, so that the Board has the head count before the annual meeting and the Zoom operators have the list of paid attendees and those requiring certificates of attendance for Professional Geologist CEUs (worth 6 CEU's).

The registration fee will be set around \$10, what whatever we think we will need to cover the internet connection fee with some buffer if registration is lighter than expected. I'm also thinking we should have an early registration discount. In person attendance will remain free.

SOCIAL MEDIA ADVERTISING - KEY TO OUR FUTURE

Coupled with and well in advance of the symposium, the FM leadership and all volunteers will embark on a guerilla social media marketing campaign to promote

the symposium, raise awareness and get new members. This campaign as I envision it, will consist of developing a network of volunteers within FM and our affiliates (YMC in particular) to push out the message to social media contacts internally to chapter and National members and Facebook Followers of our page(s) and those of our members and chapter officers, and keep that message saturated across social media platforms. We have organized a group within the Board and amongst our affiliates to get the message out, and that will involve cross-advertising with our affiliates and their messages as well. I will personally lead getting the message out to Professional Geology Boards, organizations and Geological Surveys and look for assistance getting the message out to University departments to encourage students to attend. Ultimately I'm looking for not less than 200 remote symposium attendees/new members (500 desired) and at least another 2,000 – 3,000 followers on our pages by the symposium, with the real goal of doubling our following by year's end. My opinion, for what it's worth, is that we cannot fulfill our education mission or sustain our organization in this modern era without leveraging social media to the maximum extent practical, and in addition, we cannot maintain ourselves or our chapters without a robust and active membership. With all of the hard work, experience, connections and savvy Mark puts into the symposium, and our speakers put into their talks, it seems literally a crime to me that only 50 or so walk-ins get to see these incredible talks by men and women who are top in their areas of expertise. But we have never before had a Board with sufficient experienced manpower to run a hybrid meeting and given that the internet connection will not be free, paying for it without a serious and successful ad campaign is foolhardy. Experimenting with live video as I tried to two years ago is also not a good plan. Now we have the commitment from several knowledgeable and experienced people to pull it off. I hope we can live stream all future symposia. It takes a village!

Maybe a Table at the TGMS Show?

A few of us have discussed having a table up top at the convention center where we can advertise, get new members out and improve in-person attendance. I don't think we have anything to see except memberships and Art Montgomery's book, but we have been thinking about tee shirts, maybe some other things like stickers, coffee cups, etc. All that requires design, costs the board must approve and it might not happen this year until we prove we can generate sufficient revenue from the symposium to justify taking

the risk to make such purchases, especially with TGMS selling the same kind of stuff. That may also have a cost and requires a staffing commitment. I have reached out to Pat McClain who organizes stuff for us, and have completed an application for a table. Pat had indicated in our last conversation she did not have room assignments, table space allocation or basically anything from the convention center. URGH! Stay tuned.

FIELD TRIP REPORT - HAVEY & MOUNT MICA QUARRIES

Also, please read my Field Trip Report article on my field trip to the Havey Quarry and Mt. Mica [reprinted in this issue on pages 7-8] with The East Coast Gem & Mineral Society back in Mid-August. The ECGMS was very generous inviting me as the EFMLS IPP for the second year in a row. I had assisted them in joining the EFMLS while I was President and they have grown from an 11 member start-up in February 2023 to over 100 members and have run at least 3 successful shows and dozens of field trips in the last 2 ½ years.

The venue/Airbnb we stayed at housed over a dozen of us comfortably, and we can use it as a hub for any field trips we plan in the area. The cost for a dozen of us for 3 nights would be less than one night in a hotel. I'm thinking we ought to consider a field trip next year for the pegmatite conference or something similar. Thoughts?

SPECIAL ANNOUNCEMENT - NEW MINERALOGICAL AND GEOLOGICAL RESEARCH CENTER

I first met the owner of Herkimer Mountain and Treasure Mountain Diamond Mines a couple of years ago and he described to me his vision for a research center in part devoted to the study of Herkimer "Diamond" quartz, its occurrence and the host Little Falls Dolostone (Late Cambrian). That vision began to take shape with the assembly of researchers from Rutgers and Rensselaer earlier this year. On September 11, members of the research team, the owner and myself visited the Treasure Mountain Mine property and held an in-the-field roundtable discussion where the vision, and the team responsibilities were discussed. I spent a couple days doing some survey grade mapping which included topography for the likely location for the facility, and mapping of benches, vuggy zones, pockets, and other interesting geologic features in the three main pits. The mapping will allow us to correlate the target intervals and plan for additional exploration onsite.

I have since been in regular contact with the owner, in discussions to get the Research Center actually off the ground. As I appear to be the only team member with mapping, land planning and engineering expertise, I have volunteered and been commandeered to develop a concept plan with the facility layout and a prospectus for investors, as well as assisting with the incorporation of the non-profit entity. The core team, led by David Tibbitts, PhD candidate at Rutgers and an accomplished mineral collector with a track record for winning competitive displays, presented a poster on the topic at the Geologic Association of New Jersey (GANJ) Symposium October 18, 2025, promoting the mission of the future research facility. We currently have an exploration effort planned for the spring of 2026, and I am hopeful we will have the non-profit incorporated by the end of the year in time for me to propose admitting the research center as an affiliate at our annual Board of Directors meeting Friday February 13, 2026. I also expect to be on the board of directors of the facility and to play a critical role in the facility development and the research mission of the organization.

All for now. Stay Tuned!

CALL For ARTICLES

If you are interested in contributing an article to the National or PA Chapter newsletter, contact our National Newsletter Editor Sean Stimac (articles only) or David Glick for our PA Chapter Newsletter (see page 14). Don't forget the 2026 show and symposium theme is red, white and blue minerals in celebration of the US 250th anniversary. Also, if your chapter would like a presentation via zoom, I have a dozen topics already in the bag and I am happy to provide one you select. Three have been given at past National and all have been given at PA Chapter symposia.

Be sure to look me up if you are in town. Till then, stay safe, stay tuned and happy hunting!

Sincerely,

Bill Stephens, PG, President

FM-PA & FM National



EFMLS / AFMS Federation News

FM-PA Chapter is a member of EFMLS, the Eastern Federation of Mineralogical and Lapidary Societies, and therefore an affiliate of AFMS, the American Federation of Mineralogical Societies. We encourage our readers to read the monthly newsletters available on their web sites.

The **AFMS** <<https://www.amfed.org/newsletter>> September newsletter has President JC Moore's report on attending many regional federation conventions and shows in recent months. All American Club Award winners are listed, and many Rockhound of the year honorees are introduced. Ellery Borow's safety article from the October issue, 'Got a Second?' covers the advantages of having a second person present when we engage in our activities.

The **Eastern Federation's** <<https://efmls.org/>> October Newsletter includes president Andrew "Rockhound's" column, reprinted below. Robert Weldon is announced as 2026 Wildacres Workshop Speaker-in-Residence. - *Editor*



EFMLS President's Message

from
Andrew Rockhound
EFMLS News v. 72 no. 10
October 2025

Happy October, and welcome to Fall everyone! As the days grow colder and shorter, club shows are happening and here at the EFMLS, we are preparing for 2026! Over the next couple months, we will be looking at insurance renewal rates and dues, working on setting up the online club dues payment system and welcoming new members to the team! In November, the new year starts for officers, and we welcome John Sweeney as 2nd VP, who was elected back in the spring at the convention in North Carolina. He brings his years of experience and leadership in New York clubs, and will make a great addition to the board.

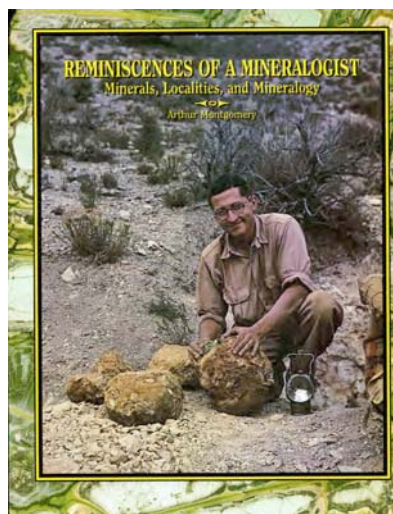
One area as president I am already looking into is selecting a school (or two) to receive one or both of the two \$4,000 scholarships awarded by the AFMS Scholarship fund. This year (2025), both were awarded to the University of Maine for 2 of their Post Grad students. If anyone has a suggestion of school they would like for me to consider, feel free to email me!

Do you have an interest in joining the EFMLS team? Let me know what you would be interested in doing, and we'll see if we can use you! As always, send us your club event pics and announcements, we will share them for everyone to enjoy!

Stay safe out there everyone, and have a great Halloween!

Reminiscences of a Mineralogist: Minerals, Localities, and Mineralogy

by Arthur Montgomery



For sale by FM-PA Chapter

First famous for specimen mining, Arthur Montgomery was later an organizer of the national Friends of Mineralogy, and was instrumental in starting The Mineralogical Record. He was a professor at Lafayette College in Easton, Pennsylvania, during which time he wrote this book, although it was not finalized and published until some years later. In fifteen chapters covering 83 pages, the author describes the start of his interest in minerals, and then traveling, collecting, and investigating minerals through his career. Chapters include bixbyite (including topaz in the Thomas Range, Utah), wulfenite (Red Cloud Mine), beryl (Harding Mine), tourmaline, diamond, mica, quartz, topaz (Thomas Range again), epidote (including Cornog, PA), zircon, olivine group, variscite (Fairfield, Utah), sterrettite, and kolbeckite.

ORDER:

Shipped to Pennsylvania addresses: \$6.00 + \$4.63
Media Mail + 0.64 PA sales tax = \$11.27

To other US addresses: \$6.00 + 4.63 Media Mail =
\$10.63

(Non-US buyers, please request a shipping quote for the cost to mail to your country:
<xidg@verizon.net>)

Make checks out to "F.M., Pa. Chapter," include your postal address and send to:

David Glick, FM-PA
425 Armagast Rd
Bellefonte, PA 16823

FIELD TRIP REPORT

ECGMS TRIP TO HAVEY QUARRY AND MT. MICA

by Bill Stephens, PG

from Bulletin of FM, Vol 55, No. 3, Sept. 2025

I was fortunate to be invited by East Coast Gem and Mineral Society, Inc. (ECGMS, EFMLS Region 1) President "Crystal Moon" Dawn Marie Crocco to participate in the second annual Maine pegmatite trip. I also attended last year, and we all stayed at the same Airbnb. This huge house served as an excellent base of operations for our activities and included fine in home dining courtesy of our culinary experts, Crystal Moon, Barb and others, not to mention wonderful bread including the best focaccia I'd ever had made by our host Lindsey.

Our first trip was to the Havey Quarry in Poland Maine, known for green and multi-color tourmaline



Figure 1. Active workings at the Havey Quarry, operated by Jeff Morrison. Holes in the sidewalls are pockets that have been cleaned out. *Bill Stephens, PG, photo*



Figure 2. View of the access road at Havey running through the mined out area of the quarry with the spoils to the left. Note the mobile drill used to drill shot holes. *Bill Stephens, PG, photo*

crystals, owned and operated by Jeff Morrison. Conditions at the mine have changed little from last year. No mining of the rock face is permitted, and visitors are not allowed in the active mining area. All digging is confined to the spoils area and large rocks within that area. The spoils have been screen extensively and the area is generally picked over. I was able to break off some mica with green tourmaline (fig. 5) off the concealed side of a large block of pegmatite. Parker recovered some exceptional pieces of lepidolite with tourmaline (fig. 6) adjacent to an empty pocket at the back wall and Beck found a nice columbite-tantalite crystal. Everyone found something they liked.

Last year Jeff gave our group a 45-minute mining history which I recorded but he was not with us for the guided tour this year. Extensive



Figure 3. Green Tourmaline (common, non-gem grade) in the wall rock, Havey Quarry. *Bill Stephens, PG, photo*



Figure 4. Drone photo showing the extent of spoils where collecting is allowed. Most collectors sift the finer material for tourmaline while checking the bigger pieces for matrix hosted tourmaline. *Bill Stephens, PG, photo.*

documentation is available on the Havey Quarry and adjacent Berry Quarry. YouTube videos, Facebook, and Instagram posts and their website will guide you to as “deep in the weeds” as your heart desires.

Our second day trip was to Mt. Mica in West Paris, Maine. Arrangements were made through “Dig Maine Gems”, an authorized guide service that runs trips only on Sundays. (Visit their website for more information). Mt. Mica is North America’s first gem tourmaline pegmatite mine, second documented elbaite occurrence, the first being Clarkes Ledge Quarry in Massachusetts. Mt Apatite has produced thousands of spectacular gem grade green, watermelon and rubellite tourmaline crystals since its discovery in 1821. The Maine State Museum has a nice historical review online.

Mount Mica has been owned and mined commercially for gems and crystals by Coromoto Minerals since 2003. An excellent if dated article on production, geology and general history may be found in *Gems and Gemology*, Summer 2005. Another publication, “Indicolite Discovery at the Mt. Mica Pegmatite” is in *Rocks and Minerals* Volume 98, 2023 Issue #6 by Gary Freeman. FM National’s Bill Besse did a locality map and map of the underground workings for that article.

You can download the “History of Mount Mica” by Augustus Choate Hamlin, 1895 for a deep dive in the early history. Visit Coromotominerals.com for recent mining activities.

Mt Mica is also mentioned in U.S. Geological Survey Bulletin 445.

See also “Maine Tourmaline” by Dr. Carl Francis in *The Mineralogical Record*, volume 16, September – October, 1985 and volume 2 of “*The Mineralogy of Maine*” by Vandall King. Check out the “Rock Fairy” on Facebook.

Stay tuned for more reports on my collecting adventures!



Figure 5. One of the better pieces I was able to break off the back side of a large block of pegmatite. Bill Stephens, PG, photo.



Figure 6. Lepidolite in feldspar matrix with quartz and one piece of common green tourmaline. Havey Quarry. Bill Stephens, PG, photo



Figure 7. Some of my finds at Mt. Mica. Clockwise from top left: beryl, schorl and garnet in matrix, lepidolite, watermelon tourmaline, garnet. Bill Stephens, PG, photo

Fluorescence and Phosphorescence of Calcite from Cavetown, Washington County, Maryland

by Calvin Harris
FM-Midwest Chapter

Introduction

Currently, there is little information that describes fluorescent minerals from Cavetown, Washington County, Maryland, especially with the development of mid-wave and several different longwave wavelength sources. This paper helps to address this deficiency by describing fluorescence and phosphorescence caused by shortwave (254nm), mid-wave (312nm), longwave (351nm) and longwave (370nm). In addition, intense phosphorescence of short duration caused by a photographic flash unit will also be used.

Geological Setting

The geology of the Cavetown Member within the Waynesboro Formation consists of dolomitic limestone, calcareous sandstone, calcareous shale and dolostone. This formation developed during the Cambrian and Ordovician Periods, some 540 to 445 million years ago. The Cavetown Member measures some 400 to 600 feet in thickness and is situated below the Chewsville Member and above the Red Run Member of the Waynesboro formation. As shown on mindat.org, Cavetown's location corresponds to 39.6420°, -77.59337°.

Mineral Descriptions

Specimen (A): This specimen measures 9.5cm × 8.5cm × 5cm, light tan and earthy luster and mammillary form. Its cross section consists of 6-7 layers with colors ranging from whitish-tan to dark tan.

Specimen (B): This specimen measures 11cm × 6.7cm × 3.2cm, light tan and earthy luster and mammillary form.

Specimen (C): This specimen measures 8cm × 7cm × 5.8cm, whitish-tan to light tan and slightly vitreous to earthy luster.

Specimen (D): This specimen measures 9cm × 7cm × 3.2cm, light tan and earthy luster and mammillary form.

Specimen (E): This specimen measures 11cm × 5.1cm × 8.7cm, light tan and earthy luster with large and small mammillary forms.

Test Procedures

The procedures allow collectors to carefully observe fluorescence and phosphorescence in the field and under controlled conditions. The procedures can be easily repeated and provide consistent results. Ultraviolet lamps, manufactured by UVSYSTEMS, INC., based in Renton, Washington, were placed 3-4 inches from the specimens to observe fluorescence; a distance of 2-3 inches and a 10-second exposure time were used to observe phosphorescence. A DC electric source was used to operate the lamps.

A Vivitar 283 portable electronic flash unit was used to determine flash, or Brief Intense Phosphorescence. This unit was placed 2-3 inches from the specimen, then discharged at full capacity. The user's eyes must be closed until discharge is complete, then rapidly opened to observe the flash.

Results

Specimen A

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, light-blue color.	Bright intensity, lime-green color, 8-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm), color not as saturated.	Similar to Shortwave (254nm)
Longwave (351nm)	Moderate intensity, light-blue color.	Low intensity, gray color, 5-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Low intensity, greenish-gray color, 6-second duration.
Flash Test	Non-applicable.	No flash.

Specimen B

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, light blue color.	Bright intensity, lime-green color, 8-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm), except less saturated color.	Similar to Shortwave (254nm).
Longwave (351nm)	Moderate intensity, light blue color.	Low intensity, gray color, 5-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Low intensity, gray with green tint, 6-second duration.
Flash Test	Non-applicable.	No <i>flash</i> .

Specimen C

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, light blue color.	Bright intensity, blue with green tint, 7-second duration.
Mid-wave (312nm)	Similar to Shortwave (254nm).	Bright intensity, lime-green color, 10-second duration.
Longwave (351nm)	Moderate-bright intensity, light blue color.	Moderate intensity, lime-green color, 7-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Low intensity, gray with green tint, 7-second duration.
Flash Test	Non-applicable.	No <i>flash</i> .

Specimen D

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-low intensity, light blue color.	Moderate intensity, light blue color, 7-second duration.
Mid-wave (312nm)	Moderate-bright intensity, blue with green tint.	Moderate intensity, blue with green tint, 7-second duration.
Longwave (351nm)	Similar to Mid-wave (312nm).	Low intensity, gray with green tint, 5-second duration.
Longwave (370nm)	Similar to Longwave (351nm).	Similar to Longwave (351nm).
Flash Test	Non-applicable.	No <i>flash</i> .

Specimen E

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, light blue color.	Bright intensity, lime-green color, 8-second duration.
Mid-wave (312nm)	Bright intensity, light blue color.	Similar to Shortwave (254nm), except lower color saturation and 9-second duration.
Longwave (351nm)	Moderate-bright intensity, light blue color.	Low intensity, lime-green color, 5-second duration.
Longwave (370nm)	Bright intensity, light blue color.	Similar to Longwave (351nm).
Flash Test	Non-applicable.	No <i>flash</i> .

SPECIMEN A: PROFILE

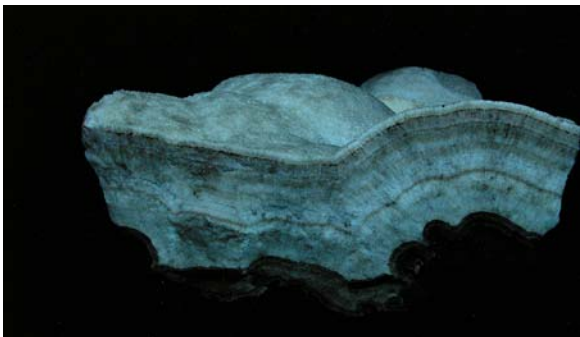
daylight



longwave 351 nm



longwave, 370 nm



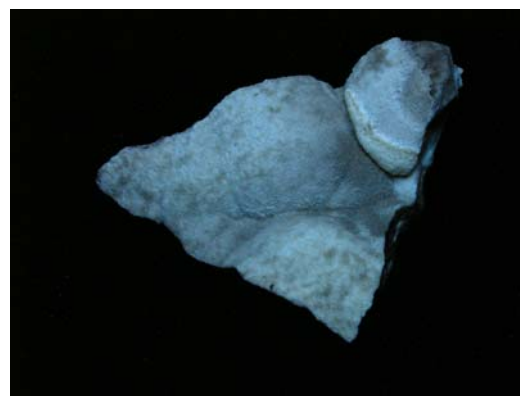
mid-wave, 312 nm

TOP VIEW

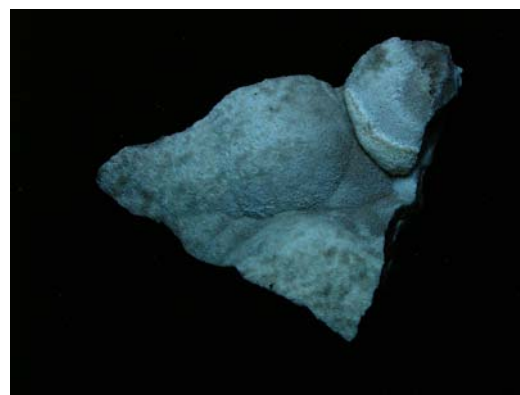
daylight



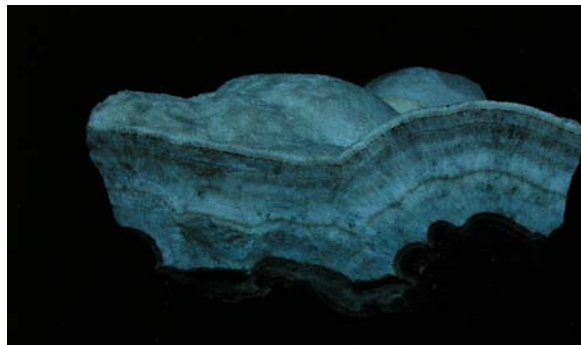
longwave 351 nm



longwave, 370 nm



mid-wave, 312 nm



shortwave, 254 nm



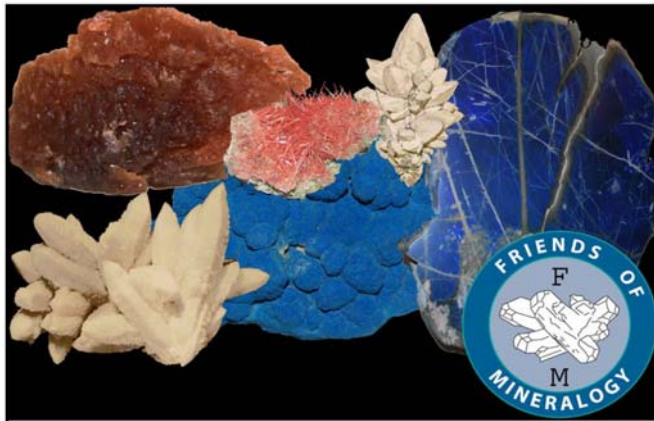
shortwave, 254 nm

Observations and Remarks

- It appears that organic activators caused the luminosity in these calcite specimens. Rare-earth elements such as divalent europium cause similar colors, but are more saturated. Research by Shopov and others has shown (supports) that luminosity in carbonate minerals can be attributed to fulvic acid, humic acids and other organic substances. These substances derive from decayed vegetative matter and are transported through open spaces in strata by groundwater. The fluorescence and phosphorescence they produce have muted colors, often produced by different wavelengths. Fluorescence emission spectra are broad-band indicating multiple wavelengths are involved. Also, these compounds exist under low- temperature hydrothermal conditions (50-200°C) and are destroyed under high temperatures (> 100°C) that do not affect divalent europium.
- The results provide additional information regarding the luminescent characteristics of calcite from Cavetown, Washington County, Maryland.
- The results were fairly consistent regardless of the different wavelengths used.
- Work is needed to identify the cause of luminosity single or multiple activators. Analytical systems such as a Raman or luminescence spectrometer coupled with an Electron Spin Resonance spectrometer or chromatograph will prove beneficial.

Selected References

- Boyer, Mark, 2011, "Flash and BIP" The Picking Table, 52 (1), Spring 2011, p. 16.
- Brezinski, David K., 1992, Lithostratigraphy of the Western Blue Ridge Cover Rocks in Maryland, Maryland Geological Survey Report of Investigations No. 55, p. 35, 38.
http://www.mgs.md.gov/reports/RI_55.pdf
 (accessed October 23, 2025)
- Hurlbut, Jr., Cornelius S., 1952, Dana's Manual of Mineralogy, 16th Ed.: John Wiley & Sons, Inc., New York, p. 421.
- mindat.org: Cavetown, Washington County, Maryland, USA, <https://www.mindat.org/loc-251741.html>
 (accessed October 23, 2025)
- Robbins, Manuel, 1994, Fluorescence: Gems and Minerals Under Ultraviolet Light: Geoscience Press, Inc., Phoenix, Arizona, p. 78-83.
- Shopov, Yavor Y., 2001, Geoespeleología: *Luminescence of Cave Minerals*. Bol. Soc. Venezolana Espel. (35) 2001: 27-33,
www.academia.edu (accessed January 11, 2025).
- Verbeek, Earl R., 1995, Activators in Fluorescent Minerals, Part 2: Some Notable Fluorescent Minerals and Mineral Groups, in *Ultraviolet Light and Fluorescent Minerals*, Thomas S. Warren, Publisher, p. 178-179.
- Wikipedia: "Waynesboro Formation",
https://en.wikipedia.org/wiki/Waynesboro_Formation,
 (accessed January 8, 2025)



Friends of Mineralogy in conjunction with the Mineralogical Society of America and the Tucson Gem & Mineral Society® is pleased to announce the

44th Annual Tucson Mineral Symposium.

Red, White, and Blue
- Celebrate the Spirit of Minerals

Saturday, February 14, 2026




ATTEND ONLINE or IN PERSON

FM-TGMS-MSA Tucson Mineral Symposium:

Red, White and Blue
– Celebrate the Spirit of Minerals
Saturday, February 14, 2026
Tucson Convention Center, Tucson, AZ

From Bulletin of FM 55:2 June 2025

The forty-fourth Mineral Symposium, held in conjunction with the Tucson Gem and Mineral Show®, will take place on Saturday, February 14, 2026. This symposium is co-sponsored by the Tucson Gem and Mineral Society®, the Friends of Mineralogy, and the Mineralogical Society of America. As a tie in with the show, the symposium theme is a modified form of the show theme: "Red White and Blue, Celebrate the Spirit of Minerals."

Presentations are expected on red, white or blue minerals – worldwide localities, geology, mineralogy, crystallography, cause of color, or geochemistry. Some examples of topics are rhodochrosite, rhodonite, rubies, red beryl, azurite, aquamarine, and linarite.

35 Years Ago in FM-PA:

from FM Pa Chapter Newsletter Vol 18 No. 3, Fall 1990

NEWS AND VIEWS

Cerianite and Xenotime:

Two New Minerals for Pennsylvania

Included in "Geological Research in Pennsylvania, 1990" (Pennsylvania Geology, vol. 21, no. 4, August, 1990) is the following note:

"J.H. Dooley, N.J. Geol. Survey and J.S. Delaney, Rutgers Univ. at New Brunswick. An Exceptional Monazite Specimen in the Basal Hardyston Formation from Morgan Hill, Pennsylvania (I-78 roadcut). Scanning electron microscopy/energy dispersive X-ray spectroscopy examination of a 36 mm-diameter euhedral specimen of monazite $\{(Ce,La,Y,Th)PO_4\}$ reveals light rare-earth-element-rich (predominately La, Ce, and Nd Oxides) exsolution lamellae of cerianite $((Ce,Th)O_2)$ and xenotime (YPO_4) . Other mineral inclusions in the monazite specimen include thorite $(ThSiO_4)$, thorianite (ThO_2) , pyrite (FeS_2) , and uraninite (UO_2) . Metamict zones, which are highly degenerated by radioisotope decay, consist of thorium-and uranium-rich phases."

Xenotime has been reported before for Pennsylvania (S.G. Gordon, Mineralogy of Pennsylvania, 1922, p. 133) and A. Montgomery (Mineralogy of Pennsylvania, 1922-1965, p. 4), but was deleted from the species list by Montgomery (1969, Pennsylvania Minerals, No. 80, Keystone Newsletter of the Mineralogical Society of Pennsylvania, vol. 18, no. 8) on the basis of lack of evidence.

The Platinum Group: New for Pennsylvania

W.E. Stone and M.E. Fleet report (American Mineralogist, vol. 75, p. 881, 1990) that a platinum-iron alloy (platinum group, species unknown) was found in kimberlite from Fayette County, Pennsylvania. in microscopic bleb-like aggregates of pyrrhotite, pentlandite, and chalcopyrite, which occur in olivine megacrysts.

Platinum was mentioned by S.G. Gordon (1922, Mineralogy of Pennsylvania, p.133), but was considered a doubtful occurrence by A. Montgomery (1969, Mineralogy of Pennsylvania, 1922-1965, p. 4).

Sudorite and Rectorite: New Minerals in Pennsylvania Clays

Eric J. Daniels and Stephen P. Altaner, writing on "Clay Mineral Authigenesis in Coal and Shale from the Anthracite Region, Pennsylvania" (American Mineralogist, Vol. 75, p. 825-839, 1990) report finding sudorite (a chlorite group mineral) and rectorite (a paragonite/smectite mineral), as well as tosudite (a chlorite/smectite) as authigenic minerals replacing kaolinite during the latest stage of coalification (anthracitization). These minerals were probably formed in the joint sets of a microenvironment by hydrothermal alteration.

UPCOMING EVENTS

Confirm details of events before attending.

Oct. 25, 2025: 35th Ultraviolation, fluorescent minerals-only show and sale. First United Methodist Church, 840 Trenton Rd., Fairless Hills PA 19030. Sat. only, 9-4. www.facebook.com/ultraviolation/

Nov. 1 - 2, 2025: Gemarama Annual Show, by Tuscarora Lapidary Society. Greater Philadelphia Expo Center, 100 Station Avenue, Oaks, PA. Sat. 10-6 / Sun. 10-5. <https://www.lapidary.org/gemarama/>

Nov. 8 - 9, 2025: Annual Symposium & Field Trip, by Friends of Mineralogy - PA Chapter. See p. 1 and <https://rasloto.com/FM/>

Feb 14, 2026: FM National - Tucson Gem & Mineral Society - Mineralogical Society of America Annual Symposium, Tucson, AZ. See page 13.

Mar 7-8, 2026: 62nd Annual Earth Science, Gem and Mineral Show, by Delaware Mineralogical Society. Doubletree by Hilton, Wilmington, DE 19803. Sat. 10-5, Sun. 11-5. www.DMSrocks.org

May 11-17, 2026: EFMLS Wildacres Workshop, Little Switzerland NC. www.efmls.org/wildacres

FM on the WWW

Please explore the FM-PA Chapter web site:

www.rasloto.com/FM/

And the Facebook page
(linked from the site above)

<https://www.facebook.com/groups/1099795867347595/>

From the Editor

David Glick

THANK YOU to everyone who has been providing material for the Newsletter! Everyone else - join the fun! Feel free to contact me at xidg@verizon.net, or 814-810-2116 days and evenings. Mail can be sent to 425 Armagast Rd., Bellefonte PA 16823. Materials for the December issue should be submitted by **December 10**.

Materials related to Pennsylvania mineralogy, collecting or collectors are invited for this newsletter: articles, long or short; announcements from FM-PA committees; photographs of specimens, field localities, collections, etc.; reports on publications about PA minerals or by PA authors, or actual book reviews; or other items within the mineralogy and mineral collecting areas of interest. Photographs should be of good resolution (at least 1000 pixels across) without much JPEG compression, so that they will look good in print. Please provide captions including photographers' names.

We are producing four issues each year; your material is needed! If you know people who have interesting material, please encourage them to submit it.

National News

The Bulletin of Friends of Mineralogy, links to other chapters, and much more can be found on their web site:

www.friendsofmineralogy.org and
www.facebook.com/FriendsofMineralogy/

We are a member club of EFMLS:

<https://efmls.org>
<https://www.facebook.com/efmls.org/>

Shows & Events

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

ADMINISTRATIVE DIRECTORY

official address:

Friends of Mineralogy - Pennsylvania Chapter
425 Armagast Road, Bellefonte PA 16823

OFFICERS and BOARD OF DIRECTORS members

President	Bill Stephens, PG	bstephens@stephensenv.com	(302) 286-0406
Vice President	Dianne Soccio		
Treasurer	David Glick	xidg@verizon.net	(814) 810-2116
Secretary	Mark Sigouin, PG		
	Mike Dunton		
	Andrew Eppig		
	William Kochanov, PG		
	Ron Sloto, PG		

COMMITTEE CHAIRS

Membership Chair	Dianne Soccio		
Field Trip Chair	Ross Elliott, PG		
Web Manager	Ron Sloto, PG		
Newsletter Editor	David Glick	xidg@verizon.net	(814) 810-2116

Members can find contact information in the Newsletter edition which they receive directly.

Friends of Mineralogy Pennsylvania Chapter Web Site: <http://www.rasloto.com/FM>

November 2025 Symposium Another Success

Friends of Mineralogy Pennsylvania Chapter and West Chester University Earth and Space Sciences Department held our 2025 Symposium and Field Trip for Mineral Collectors on November 8 and 9. The Symposium, with informative talks by knowledgeable speakers on minerals, geology and mining in Pennsylvania and beyond, was a hybrid meeting with attendance both in person and via Zoom. As usual, it included morning refreshments, a silent auction, give-away table, and plenty of opportunities for visiting with fellow enthusiasts. The West Chester University Geology Museum and the Interactive Periodic Table, in connecting buildings, were available all day. FM-PA is grateful to everyone at WCU who made this venue work well and affordably for us.

The schedule covered 8:00 a.m. to 5:00 p.m., with six speakers, the annual meeting, and breaks with time for refreshments, lunch, discussions, and visiting the silent auction and the geology museum. We weren't able to fill our schedule with talks on the Red, White, and Blue

Continued on page 2

**44th Friends of Mineralogy /
Tucson Gem & Mineral Show /
Mineralogical Society of America
Tucson Mineral Symposium
Red, White and Blue –
Celebrate the Spirit of Minerals
Saturday, February 14, 2026
at Tucson Convention Center
or via Zoom
WATCH FOR NEWS**

FM-PA DUES ARE DUE

If our records show that you have not yet renewed for 2026, you will find a dues form attached or included with this newsletter. We appreciate your prompt renewal, with check and paper form, or by using the PayPal link and the PDF form at <https://rasloto.com/FM/join-fm-pa/>



Symposium, continued from page 1

Minerals theme as we originally hoped, but several of the presentations covered such minerals or colonial / revolutionary connections pertinent to the United States' 250th anniversary.

The topics and presenters were:

- Famous Mineral Localities of Delaware County, Pennsylvania - by Ronald A. Sloto, PG, West Chester University
- The Hogg Mine: A Tale of Two Machine Digs Revisited - by Bill Stephens, PG, Stephens Environmental
- Importance of lead mineralogy on the historic Pennsylvania frontier - by Dr. Ryan Mathur, Dr. Jonathan Burns, lots of students, and others, Juniata College
- The Fossils of the C&D Canal, Delaware: Late Cretaceous Life of the Mid-Atlantic Coastal Plain - by Luke Jackson, West Chester University
- Amethyst from East Bradford Township, Chester County, Pennsylvania - by Anatoly Bitny
- Minerals of the Phoenixville Mining District - by Ross Elliott, PG, Delaware Mineralogical Society, and Bill Stephens, PG, Stephens Environmental

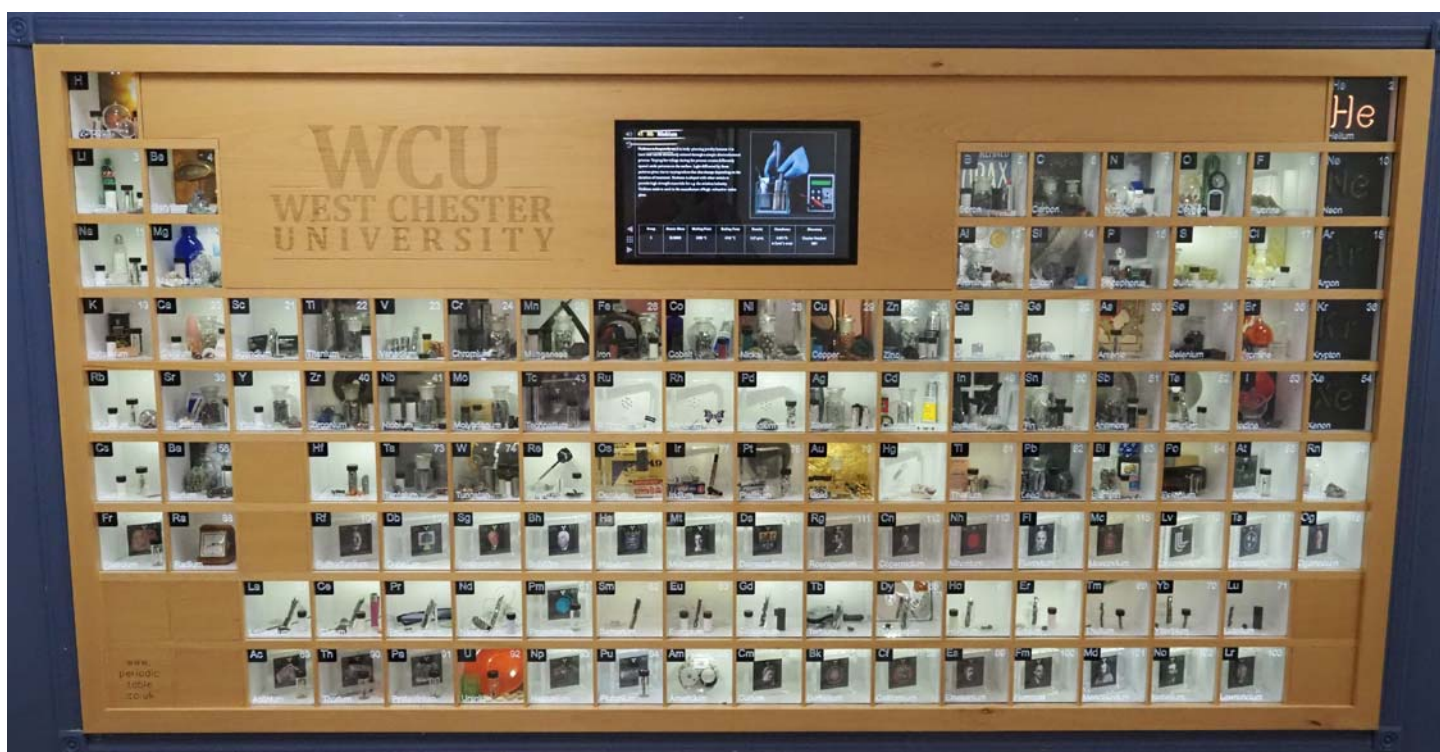
In-person attendance was about 44; another 26 people attended via Zoom, for a total of 70. About 16 registered professional geologists and five students were among the attendees.

The silent auction and giveaway table, long-time favorites at our Symposia, were organized by Ron Sloto. Thanks to generous donations and active bidding, the auction did well this year.



Above: Display of "Minerals from Pennsylvania's Active Quarries" specimens donated by the late Skip Colflesh, in the WCU Geology Museum. Below: WCU Geology Museum. *D. Glick photos.*





Above: The Interactive Periodic Table takes up an entire wall.
Below: A close-up including some elements important in mineralogy.

D. Glick photos



Annual Meeting and Elections

A brief annual meeting of the membership of the chapter was held in the morning. This normally includes election of members of the Board of Directors, divided across a three-year cycle. However, it was noted that there were no incumbents or candidates in this year of the three-year cycle.

In a Zoom Board meeting on December 9, the Board of Directors elected the incumbents to serve another term in their offices; see the list on page 8.

Field Trip to Phoenixville Sites

Bill Stephens and Ross Elliott organized the Symposium field trip to the Phoenixville lead-zinc-copper mines (Brookdale and Southwest Chester) at Pickering Valley Golf Club on Sunday, November 9. A mini-excavator exposed some new material just before the event, but not as successfully as hoped. Still, the weather wasn't bad, there was a good turnout, and specimens were found. These dumps are known for pyromorphite, cerussite, wulfenite, galena, and drusy quartz.



Collecting on the Brookdale Mine dumps.

R. Sloto photograph



Collecting on the Southwest Chester County Mine dumps.
R. Sloto photograph



Collecting on the Brookdale Mine dumps.
R. Sloto photograph

FM Social Media Campaign

Members and others! Friend President Bill Stephens on Facebook for regular updates on FM National, FM-PA and all FM Chapters including Symposia and Events. We want to get the word out to everyone! The big event of the year, the FM / TGMS / MSA Symposium in Tucson, is coming up in February! See page 7.

The 11th Annual **NEW ENGLAND**

**MINERAL
CONFERENCE**

2026 **MAY 15-17**
NEWRY, MAINE

*Grand Summit Resort Hotel & Conference
Center at the Sunday River Resort*

Pre-register by May 1, 2026 and save!

Dealers: Contact us!

<https://www.nemineral.org/annual-conference/>



EFMLS / AFMS Federation News

FM-PA Chapter is a member of EFMLS, the Eastern Federation of Mineralogical and Lapidary Societies, and therefore an affiliate of AFMS, the American Federation of Mineralogical Societies. We encourage our readers to read the monthly newsletters available on their web sites.

In the AFMS December Newsletter, new President Ronna Watkins reviews recent AFMS accomplishments (Uniform Rules updates, Public Relations initiatives, Juniors Committee programs, Convention events) and introduces herself. The Public Relations Chair writes about raising a club's profile through community action and involvement. Several Rockhound of the year Honorees are introduced. The safety article is on "T", saying, "Yes, we trust the safety efforts of others, but we also want to put the "T" in safety as being ultimately responsible for our own safety... and in helping with the safety of others." The New Programs Competition entry deadline of January 15 is noted. Historian Jennifer Haley requests cartoons and poems from vintage newsletters (and current ones too) for a collection she is compiling. There are Christmas rockhound poems and more in this issue!

The Eastern Federation's December Newsletter includes an article on the 2025 AFMS Scholarship Award winners in EFMLS at University of Maine - Orono, reprinted on page 3. An article on dinosaurs' communication, tactile sensitivity, parental care, etc., is reprinted on page 4; our children's common fascination with dinosaurs can be an entry point for encouraging interest in nature and conservation. The 2026 Wildacres session will be May 11-17, and detailed course descriptions and instructors' biographies are provided. Courses listed are: Advanced Wire Wrapping, Viking Knit, Cabochon Making, Introduction to Inlay, Fused Glass, PMC-Silver, Faceting, and Geology. The EFMLS President's Message from Andrew 'Rockhound' is reprinted at right.

-Editor



EFMLS President's Message

from
Andrew Rockhound
EFMLS News v. 72 no. 12
December 2025

Happy Holidays everyone, the EFMLS wishes a merry holiday season that is warm, happy and full of cheer! It's now December and every club treasurer is wondering what insurance rates will be for 2026... Well unfortunately, at the time of this writing we have not yet received the quote from Brown & Brown, but do expect it within days. Member dues have not changed, but without an official quote, we do not know what the insurance rate will be. Stay tuned, we should have rates and renewal forms posted and clubs notified as soon as we hear, most likely within the couple weeks of December!

As I write this on November 30th, just after returning from New York, digging Herkimer Diamonds in 5" of snow with Geology Club members and was wondering - What is your club doing for members this holiday season? Holiday party/Special event? Send us your pics to post on social!

As always, if you'd like to contribute to the EFMLS in any way, let us know by emailing me at president@efmls.org and I will see what we can do. Have a very merry December, and please deck those halls with plenty of rocks! Then send us pics to share!



West Chester University Geology Museum from the hallway.

D. Glick photo

AFMS Scholarship Foundation 2025

Honorary Award Plaque for
Distinguished Achievement in the Field
of Earth Sciences awarded to Dr. Alicia

(Cici) Cruz-Uribe

from EFMLS News

v. 72 no. 12 Dec. 2025



Photo: Sylvia Eppig, Lauren Madsen, Dr. Alicia Cruz-Uribe, Josephine Fernholz

I recently had the pleasure of travelling to the University of Maine School of Earth and Climate Sciences, Orono campus, to present the Honorary Award Plaque for Distinguished Achievement in the Field of Earth Sciences to Dr. Alicia Cruz-Uribe for 2025. Andrew Rockhound submitted her name on behalf of EFMLS to the AFMS Scholarship Foundation for this award and the Foundation awarded two of her grad students \$4000 scholarships! I was fortunate to not only meet Dr. Cruz-Uribe, but also both of the students, Lauren Madsen and Josephine Fernholz. All three were extremely appreciative of the scholarships, especially since scholarships at this amount are becoming rare!

Dr. Cruz-Uribe is the Edward Sturgis Grew Associate Professor of Petrology and Mineralogy and is the head of the MAGIC Lab (MicroAnalytical Geochemistry and Isotope Characterization Laboratory). Her specialty, metamorphic petrology, is the study of the composition, structure, and origin of metamorphic rocks, as well as the processes that form and alter them. Per her bios on the UMaine Earth and Climate Sciences Department and the Mass Spec Academy, she is particularly interested in understanding the geochemical link between metamorphic processes in subducted slabs and arc volcanism. Her current focus is on using a laser



ablation unit coupled to tandem mass spectrometers for trace elements mapping and geological dating.

Lauren Madsen, a PhD student, just co-published a three-year study that redefined the understanding of manganese resources in northern Maine. The U.S. currently imports all manganese, which is essential for steel production and used in clean energy technology. However, northern Maine contains the largest manganese reserve in the U.S., which has been known to geologists for years, but has not been explored. The team completed a geologic remapping of manganese-bearing rocks which led them make several major research breakthroughs and provided more reliable data on manganese resources in Maine in the attempt to protect U.S. production from supply chain disruptions.



Polished Banded Manganese Ironstone Ore

She is currently working with Dr. Cruz-Uribe to analyze rock structures at the microscopic level to better understand how deposits were formed and why in Maine. This will aid in understanding where to locate commercially viable minerals in a way not used before.

Josephine Fernholz is an M.S. graduate student who has joined Dr. Cruz-Uribe and Lauren in their research.

On a different note, this incredible petrified wood piece, about 2 feet in diameter, was donated to the department.

It is so heavy it needs a specially designed stand for it to be displayed on. Until then, it sits on the floor!

It was exciting to me to meet these three ladies who are breaking new ground, literally and figuratively, with their research on a microscopic level that is changing the understanding of how and when our Maine rocks formed and where to locate new deposits of commercially viable minerals.

- Sylvia Eppig, EFMLS Treasurer

ATTEND ONLINE or IN PERSON**FM-TGMS-MSA Tucson Mineral Symposium:****Red, White and Blue****– Celebrate the Spirit of Minerals****Saturday, February 14, 2026****Tucson Convention Center, Tucson, AZ**

From Bulletin of FM 55:2 June 2025

The forty-fourth Mineral Symposium, held in conjunction with the Tucson Gem and Mineral Show®, will take place on Saturday, February 14, 2026. This symposium is co-sponsored by the Tucson Gem and Mineral Society®, the Friends of Mineralogy, and the Mineralogical Society of America. As a tie in with the show, the symposium theme is a modified form of the show theme: “Red White and Blue, Celebrate the Spirit of Minerals.”

Presentations are expected on red, white or blue minerals – worldwide localities, geology, mineralogy, crystallography, cause of color, or geochemistry. Some examples of topics are rhodochrosite, rhodonite, rubies, red beryl, azurite, aquamarine, and linarite.

**Berks Mineralogical Society**

Presents

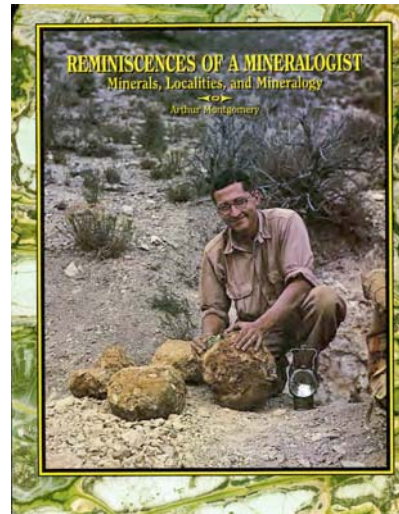
THE**57TH*****ANNUAL*****WORLD OF GEMS****& MINERALS****GEMSTONES, JEWELRY, ROCK****MINERAL & FOSSIL SHOW****May 2 & MAY 3, 2026****SAT. 10 - 5 SUN. 10 - 4****Leesport Farmers Market Banquet Hall**

312 Gernant's Church Rd. Leesport, PA 19533

Admission Donation \$ 5.00

MINERAL DISPLAYS
ACTIVITIES
EDUCATIONAL!GREAT FOR KIDS!
THE BEST SHOW IN BERKS
COUNTY!For more info, visit berksmineralsociety.com**Reminiscences of a Mineralogist:
Minerals, Localities, and Mineralogy**

by Arthur Montgomery

**For sale by FM-PA Chapter**

First famous for specimen mining, Arthur Montgomery was later an organizer of the national Friends of Mineralogy, and was instrumental in starting The Mineralogical Record. He was a professor at Lafayette College in Easton, Pennsylvania, during which time he wrote this book, although it was not finalized and published until some years later. In fifteen chapters covering 83 pages, the author describes the start of his interest in minerals, and then traveling, collecting, and investigating minerals through his career. Chapters include bixbyite (including topaz in the Thomas Range, Utah), wulfenite (Red Cloud Mine), beryl (Harding Mine), tourmaline, diamond, mica, quartz, topaz (Thomas Range again), epidote (including Cornog, PA), zircon, olivine group, variscite (Fairfield, Utah), sterrettite, and kolbeckite.

ORDER:

Shipped to Pennsylvania addresses: \$6.00 + \$4.63 Media Mail + 0.64 PA sales tax = \$11.27

To other US addresses: \$6.00 + 4.63 Media Mail = \$10.63

(Non-US buyers, please request a shipping quote for the cost to mail to your country:

<xidg@verizon.net>)

Make checks out to “F.M., Pa. Chapter,” include your postal address and send to:

David Glick, FM-PA

425 Armagast Rd

Bellefonte, PA 16823

UPCOMING EVENTS

Confirm details of events before attending.

Jan. 31, 2026: Rutgers Geology Museum 58th Annual Open House; theme: TBA. New Brunswick NJ 08901 See web site for admission and parking payment.

<https://geologymuseum.rutgers.edu/annual-open-house>

Feb 14, 2026: FM National - Tucson Gem & Mineral Society - Mineralogical Society of America Annual Symposium, Tucson, AZ. Attend ONLINE or in person - see page 7. <https://www.friendsofmineralogy.org/>

Mar 7-8, 2026: 62nd Annual Earth Science, Gem and Mineral Show, by Delaware Mineralogical Society. Doubletree by Hilton, Wilmington, DE 19803. Sat. 10-5, Sun. 11-5. www.DMSrocks.org

Mar. 28-29, 2026: Gem & Mineral Show by Che-Hanna Rock & Mineral Club. Wysox Vol. Fire Co. Social Hall, 111 Lake Rd., Wysox PA 18854. Sat. 9-5, Sun. 10-4. <http://chehannarocks.com/show.html>

Mar. 28-29, 2026: Mineral Treasures and Fossil Fair, by Philadelphia Mineralogical Society. Lulu Temple, 5140 Butler Pike, Plymouth Meeting, PA 19462 (PA Turnpike, exit 333; or I-476, exit 20) . www.phillyrocks.org

May 2-3, 2026: 57th Annual World of Gems & Minerals: Gemstones, Jewelry, Rock, Mineral & Fossil Show, by Berks Mineralogical Society. Leesport Farmers Market Banquet Hall, 312 Gernant's Church Rd. Leesport PA 19533. Sat 10-5, Sun 10-4. See p. 7. berksmineralsociety.com

May 11-17, 2026: EFMLS Wildacres Workshop, Little Switzerland NC. www.efmls.org/wildacres

FM on the WWW

Please explore the FM-PA Chapter web site:

www.rasloto.com/FM/

And the Facebook page
(linked from the site above)

<https://www.facebook.com/groups/1099795867347595/>

ADMINISTRATIVE DIRECTORY

official address:

Friends of Mineralogy - Pennsylvania Chapter
425 Armagast Road, Bellefonte PA 16823

OFFICERS and BOARD OF DIRECTORS members

President	Bill Stephens, PG	bstephens@stephensenv.com	(302) 286-0406
Vice President	Dianne Soccio		
Treasurer	David Glick	xidg@verizon.net	(814) 810-2116
Secretary	Mark Sigouin, PG		
	Mike Dunton		
	Andrew Eppig		
	William Kochanov, PG		
	Ron Sloto, PG		

COMMITTEE CHAIRS

Membership Chair	Dianne Soccio		
Field Trip Chair	Ross Elliott, PG		
Web Manager	Ron Sloto, PG		
Newsletter Editor	David Glick	xidg@verizon.net	(814) 810-2116

Friends of Mineralogy Pennsylvania Chapter Web Site: <http://www.rasloto.com/FM>

From the Editor

David Glick

THANK YOU to everyone who has been providing material for the Newsletter! Everyone else - join the fun! Feel free to contact me at xidg@verizon.net, or 814-810-2116 (landline) days and evenings. Mail can be sent to 425 Armagast Rd., Bellefonte PA 16823. Materials for the March issue should be submitted by **March 1**.

Materials related to Pennsylvania mineralogy, collecting or collectors are invited for this newsletter: articles, long or short; announcements from FM-PA committees; photographs of specimens, field localities, collections, etc.; reports on publications about PA minerals or by PA authors, or actual book reviews; or other items within the mineralogy and mineral collecting areas of interest. Photographs should be of good resolution (at least 1000 pixels across) without much JPEG compression, so that they will look good in print. Please provide captions including photographers' names.

We are producing four issues each year; your material is needed! If you know people who have interesting material, please encourage them to submit it.

National News

The Bulletin of Friends of Mineralogy, links to other chapters, and much more can be found on their web site:

www.friendsofmineralogy.org and
www.facebook.com/FriendsofMineralogy/

We are a member club of EFMLS:

<https://efmls.org>
<https://www.facebook.com/efmls.org/>

Shows & Events

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

Members can find contact information
in the Newsletter edition which they
receive directly.