

FRIENDS OF MINERALOGY

MIDWEST



Mundy's Landing (Kentucky) Fluorite on Calcite approx. 2" fov

Midwest Chapter Newsletter for January – February 2021



Additional view of another section of the pocket from Mundy's Landing - editor collected

Treasurer's Report

Treasurer@fommidwest.org

Jeff Spencer – Treasurer 513-476-2163

Since the November meeting I have had a chance to compile a complete picture of our year-to-date financial activity. My report at the meeting did not include our 2-year web hosting and domain registration (\$226.52) expense. Here is the complete statement.

Since about half of our 2020 dues were received before January 1st, they are not included in 2020 revenues. We have \$8,557.77 in the treasury account. We also have a \$328.00 credit with National FM against future dues.

2021 Registrations

If you were a paid member in 2020 you do not need to re-register for 2021. Donations are encouraged as always. New members need to register and pay their \$20.00 dues payment. If you have questions about your status please contact me!

<http://www.fommidwest.org/registration-forms/> ← follow this link for membership forms

Earlier in 2020, I responded on behalf of the organization to a questionnaire from the Ohio Secretary of State on the pandemic impacts to our organization. Over 6000 non-profit organizations responded. A link to the study results is included below.

[Ohio-Nonprofit-COVID-19-Survey-Wave-2-Report \(ohio.gov\)](https://www.ohio.gov/ohio-nonprofit-coVID-19-survey-wave-2-report)

The impacts are broad and deep and will challenge the survival of many organizations. It is critical that we have a plan for restoration of our group's activities and programs. At first it will be a skeletal outline, but we can add detail as more becomes known. See the report on the next page.

FMMWC Covid-19 Pandemic Recovery Plan

Impacted area	Impact	Goal	Actions
Leadership/Staffing	Lack of meetings and contacts has made it difficult to recruit candidates for key leadership positions	Fill all elected and appointed positions	Redefined vice-president and field trip/safety director positions. Publicize changes and recruit for open positions
Membership	Down 10%. Risk of shrinkage and delayed registration in 2021	Maintain/grow membership level	Extended 2020 memberships through 2021 Publish plan for restoration of programs
Finance	Lower revenues for 2020 Reserve funds will be required to offset loss of membership and fund-raising revenues for 2021 revenues.	Return to generating surplus funds in 2022	National dues moratorium/credit Restore membership and programs Encourage donations Fill fund-raising coordinator position
Programs-Meetings	2020-in-person cancelled	2021 on-line meetings TBD in-person potential late 2021	On-line meetings conducted
Programs-Symposium	2020 cancelled	No plans for 2021	Determine if postponing to 2022
Safety Training	2020 cancelled	None planned at this time in-person potential late 2021	On-line/remote being investigated.
Field Trips	2020 cancelled	None planned at this time potential later in 2021	Monitor situation and report

Friends of Mineralogy, Inc. Midwest Chapter

Annual Business Meeting Minutes- November 14, 2020

Virtual & Teleconference Meeting

Liaison Officer Randy Marsh welcomed those who attended the meeting.

Called to order by Liaison Officer Marsh at 1:05 PM, after declaring a quorum. Seven members were present during the meeting. The following officers were present: Randy Marsh, Liaison Officer; Jeff Spencer, Treasurer; Frank Konieczki, Secretary. Additional attending members were: Ken Bladh; Steve Bonney; Johan Maertens; Clyde Spencer. Vice President Field Trips Reggie Rose was unable to attend.

The following items/topics were presented and discussed:

Approval of Previous Meeting Minutes:

Liaison Officer Marsh asked if any corrections to the November 2, 2019 meeting minutes that were published in the January-February 2020 newsletter or the minutes of the officers' meeting held on October 31, 2020 were necessary. He displayed the minutes to the attendees for review. No changes to the minutes were suggested or adopted by the attendees. A motion was requested and made to accept both minutes as published, and the motion was passed by unanimous vote. (CSpencer/Maertens/P).

Approval of Annual Business Meeting Agenda:

The agenda outline was presented to those in attendance. Officer Marsh asked if there were any comments or proposals for changes to the agenda. No changes were recommended, and the motion introduced to approve the agenda passed without opposition (Konieczki/CSpencer/P).

Officer Reports:

Treasurer's Report: Treasurer Jeff Spencer stated that there have been no changes since the last report that was published in the newsletter. He noted there are 87 current members, and he also indicated that the extension of dues for 2021 is approved (see New Business), FM Midwest will have 87 members to begin 2021. \$328 in member dues were paid to National in 2020 before National excused 2020 dues for all chapters, so Treasurer Spencer will ask for a credit. Clyde Spencer subsequently introduced a motion to petition FM National to also excuse dues for 2021, and the motion was unanimously passed (CSpencer/Konieczki/P). Member Maertens asked if scholarship funding will continue. Treasurer Spencer clarified the matter by stating FM Midwest does not have any current scholarship expenses but has funded awards at local mineral shows; however, no such awards were disbursed in 2020, owing to event cancellations. He indicated that National has a grant application process, but FM Midwest has not formally applied.

Vice President Field Trips: Vice President Field Trips Reggie Rose was unable to attend the meeting. There was a short discussion pertaining to 2020 field trips. GLA/ Sylvania Minerals hosted field trips this year, but most of the other quarries were closed to collecting in 2020. Clyde Spencer indicated a couple of small scouting trips took place north of Lima, but the sites are either too small or too sparsely mineralized to support large groups. Liaison Randy Marsh has been in touch with Marblehead, but LaFarge is currently allowing only essential personnel into their sites. Treasurer Spencer suggested that smaller, informal opportunities might offer a chance for members to participate. He noted that the 2021 Tucson Show is cancelled.



Liaison Officer: Liaison Officer Randy Marsh noted that communications with National have been sparse, except for dues.

Secretary: Secretary Frank Konieczki indicated FM Midwest will have an educational table at the 2021 Greater Detroit Gem, Fossil and Mineral Show, provided the event is not cancelled.

Old Business: None

New Business:

First, the matter of dues was discussed, and as indicated in previous communications, a proposal was brought to the floor. Specifically, as suggested by Treasurer Jeff Spencer, only new members would be required to pay 2021 dues because current 2020 memberships would be extended through 2021. The aforementioned proposal was brought to the floor as a motion and passed 6-0, with 1 abstention (JSpencer/Bladh/P).

The second item brought forth as new business was modification of FM Midwest Constitution. Meeting Chair Marsh summarized the proposed changes that had been sent to all members. Briefly stated, these changes would be as follows: amending the First Vice President role to be solely administrative; eliminating the Second VP; moving the field trip responsibilities of the Second VP position to a newly created Field Trip Chairperson position; allowing officers to also be a Chairperson. He noted that this was done, in part, to assist the field trip coordinator in fulfilling their role without having an obligation to serve as an officer. Clyde Spencer noted that the field trip coordinator may have more influence if that role was an officer, not chairperson position. Ken Bladh agreed, adding that field trips are important to the Chapter, so having a person who coordinates field trips in an officer's role is preferred, and he also noted that safety training is also important to the organization, so it would be natural to combine these roles. Treasurer Spencer observed that this suggestion would achieve the original goal while retaining the current number of officers. All present agreed that the discussed changes would benefit the Chapter. Subsequently, a motion was made to revise the FM Midwest Constitution to reflect 1) the role of First Vice President would be renamed Vice President and be an exclusively administrative role, with no programs responsibility 2) Second Vice President would be renamed Field Trips/Safety Officer and the current duties as backup for the President and First Vice President would be eliminated 3) officers would also be able to serve as chairpersons. The motion passed unanimously (Bladh/Maertens/P)

The nomination and election of officers was discussed. All current officers (Randy Marsh, Jeff Spencer, Reggie Rose and Frank Konieczki) had previously indicated they would be willing to continue in their current roles for the coming year (see October 31, 2020 meeting minutes). The former position of Vice President- Field Trips would now be named Field Trips/Safety Officer. The floor was opened for nominations, and the proposed slate of officers placed on the ballot was: Reggie Rose, Field Trips/Safety Officer; Jeff Spencer, Treasurer; Randy Marsh, Liaison Officer; Frank Konieczki, Secretary. The floor was closed for nominations. A motion was made to accept the proposed slate of officers, and the motion was carried by unanimous vote (RMarsh/KBladh/P). Subsequently, a separate motion was made to allow another officer to chair meetings if the Chapter is unable to fill the roles of the President and Vice President, or if both aforementioned officers were unavailable to fulfill their roles. The motion was carried without opposition (RMarsh/KBladh/P).

For the Good of the Order: Liaison Officer Marsh thanked all attendees for joining the meeting to benefit the Chapter. Treasurer Spencer indicated perhaps we could further encourage members to fill the vacant roles.

A motion to adjourn was entered (RMarsh/CSpencer/P)

Meeting adjourned: 2:02 PM.

Respectfully submitted by Frank Konieczki, Secretary

Luminosity of Minerva #1 Mine Barite

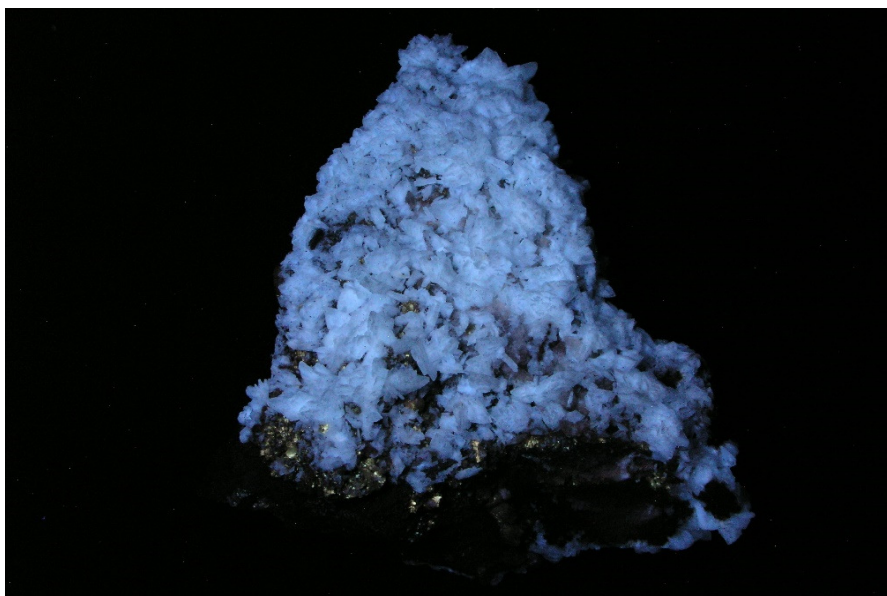
by Calvin Harris

Introduction

Minerva #1 mine in Hardin County, Illinois is well known among mineral collectors for the fluorescent minerals that exhibit interesting luminescent properties. The purpose of this essay is to describe in detail, observations regarding the effect various wavelengths of ultraviolet light has on barite specimens from this locality.



Barite Specimen Daylight



Barite Specimen SW UV Light

Geological Setting

Minerva #1 mine is located in the far southeast section of Illinois near the Ohio River and is part of the Illinois-Kentucky fluorspar District. This district is a Fluoritic subtype Mississippi Valley-Type deposit (MVT), where mining fluorite is economically feasible. MVT are low temperature (50°-200° C) lead and zinc ore deposits within limestone or dolostone strata. Mineralization takes place far from igneous activity and occurs when precipitation from highly saline brine solutions undergo epigenetic emplacement. The type of ore deposit in Minerva #1 mine is bedding replacement, which features alternating mineral deposition. Other fluorescent minerals found in this mine include alstonite, aragonite, calcite, celestite, fluorite, strontiatite and witherite.

General Specimen Description

Nine specimens were used for this study. These specimens are part of my study collection of fluorescent minerals and were amassed over several years. Their sizes range from thumbnail to medium cabinet. Many have well developed tabular and prismatic crystalline forms measuring between < 0.5 cm to 1.5 cm on edge. Others consists of poorly developed crystalline forms or are massive. Some samples are transparent, while others are opaque. The

colors of the specimens were mainly white, but in some cases, impurities produce light gray, tan and blue coloration.

Test Procedures

The wavelengths used to generate fluorescence and phosphorescence include 254nm (shortwave), 312nm (mid-wave), 351nm (longwave) and 370nm (longwave). Fluorescence was assessed by placing a lamp 3-4 inches from the specimen. The lamps were placed 1-2 inches to evaluate phosphorescence. A 20-second exposure time was adequate to determine the color, intensity and duration of phosphorescence. All measurements were estimated.

The results of exposure to ultraviolet radiation are described below:

Shortwave (254nm); Mid-wave (312nm); Longwave, LW1 (351nm); Longwave, LW2 (370nm)

Specimen Code: ch2015037fl				
	Shortwave	Mid-wave	LW1	LW2
Fluorescence	Lime-green color; bright intensity.	White w/lime-green tint; bright intensity.	White coloration; mod-bright intensity.	Light cream color; mod/bright intensity.
Phosphorescence	Lime-green; mod/bright intensity; 4 sec. duration.	Lime-green color; moderate intensity; 6 sec. duration.	Color indeterminate; very low intensity; 2 sec. duration.	Results similar to LW1.

Specimen Code: ch2015040fl				
	Shortwave	Mid-wave	LW1	LW2
Fluorescence	Area of yellow-cream coloration, moderate-bright intensity. Area of pale-blue coloration, moderate-low intensity.	Area of yellow-cream coloration, moderate-low intensity. Area of blue-gray coloration, moderate-low intensity.	Color and intensity similar to MW.	Results similar to LW1.
Phosphorescence	Bluish-green coloration; moderate-low intensity; 6 second duration.	Gray w/greenish tint; very low intensity; 3 second duration.	Gray coloration; very low intensity; 2 second duration.	No response.

Specimen Code: ch2015043fl				
	Shortwave	Mid-wave	LW1	LW2
Fluorescence	White w/bluish tint; moderate intensity.	White w/bluish tint; bright intensity.	Color similar to MW; moderate intensity.	Results similar to LW1.
Phosphorescence	Lime-green coloration; moderate intensity; 3 second duration.	Greenish-blue coloration; moderate-low intensity; 7 second duration.	Greenish-gray coloration; very weak intensity; 3 second duration.	Greenish-gray coloration; very weak intensity; 3 second duration.

Specimen Code: ch2015056fl				
	Shortwave	Mid-wave	LW1	LW2
Fluorescence	Powder-blue coloration; moderate-low intensity.	Powder-blue coloration; moderate-bright intensity.	White w/blue tint; moderate-bright intensity.	Results same as LW1.
Phosphorescence	Lime-green coloration; moderate-bright intensity; 6 second duration.	Lime-green color; moderate-low intensity; 6 second duration.	Light-gray coloration; low intensity; 4 second duration.	Color: indeterminate; very low intensity; 3 second duration.

Specimen Code: ch2017018fl				
	Shortwave	Mid-wave	LW1	LW2
Fluorescence	Gray-blue coloration; moderate-low intensity.	Blue-gray coloration; moderate intensity.	Blue-gray coloration; moderate intensity.	Greenish-gray coloration; moderate intensity.
Phosphorescence	Sky-blue coloration; moderate intensity; 7 second duration.	Sky-blue coloration; moderate intensity; 7 second duration.	Sky-blue coloration; low intensity; 4 second duration.	Blue-gray coloration; very low intensity; 4 second duration.

Specimen Code: ch2017019fl				
	Shortwave	Mid-wave	LW1	LW2
Fluorescence	Blue-gray coloration; moderate-low intensity.	Gray coloration; moderate-low intensity.	Blue-gray coloration; low intensity.	Blue-gray coloration; moderate-low intensity.
Phosphorescence	Lime-green coloration; low intensity; 3 second duration.	Lime-green coloration; low intensity; 2 second duration.	Color: indeterminate; very low intensity;	Color: indiscernible; extremely low

			3 second duration.	intensity; 2 second duration.
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Specimen Code: ch2017029fl				
	Shortwave	Mid-wave	LW1	LW2
Fluorescence	Bluish-gray coloration; low intensity.	Similar to SW.	Blue-grey coloration; low intensity.	Color similar to LW1; intensity slightly brighter.
Phosphorescence	Bluish-green coloration; very low intensity; 4 second duration.	Gray coloration; low intensity; 4 second duration.	Gray coloration; extremely low intensity; 1 second duration.	Color: indeterminate; extremely low intensity; 1 second duration.

Specimen Code: ch2019008fl				
	Shortwave	Mid-wave	LW1	LW2
Fluorescence	Powder-blue; moderate/bright intensity.	Color, intensity, similar to SW.	White w/bluish tint; moderate-low intensity.	Results similar to LW1.
Phosphorescence	Powder-blue w/slight green tinge; moderate intensity; 8 second duration.	Greenish-blue coloration; moderate intensity; 6 second duration.	Gray w/green tint; low intensity; 4 second duration.	Bluish-gray coloration; low intensity; 4 second duration.

Specimen Code: ch2019011fl				
	Shortwave	Mid-wave	LW1	LW2
Fluorescence	Pale, bluish-green coloration; bright intensity.	Similar to SW.	White coloration; moderate-bright intensity.	White w/very slight green tint; bright intensity.
Phosphorescence	Lime-green coloration; bright intensity; 7 second duration.	Color, intensity similar to SW; 9 second duration.	Color similar to MW; moderate-bright intensity; 4 second duration.	Color similar to LW1; moderate-low intensity; 4 second duration.

Findings

Generally, the responses to ultraviolet radiation were closely related, but each specimen produced unique results. As a rule, fluorescent and phosphorescent color saturation and brightness diminished with longer wavelengths. These colors were white with blue or green tint, lime-green and gray. The phosphorescent duration lessened with longer wavelengths. Interestingly, it was quite apparent that the phosphorescence of these barite samples exhibited an accumulative effect in terms of brightness. At least a half-hour was allowed for dissipation if re-testing was needed. There was no apparent correlation between daylight color, the amount of light capable of passing through a specimen and crystal habit with luminescent responses.

Selected References

Schuberth, Christopher. 1988. "The Geology of Illinois." 1983. *Rocks and Minerals* 63, no. 3 (May/June): 184-192.

Goldstein, Alan. 1997. "The Illinois-Kentucky Fluorite District." *The Mineralogical Record* 23, no. 1 (Jan/Feb): 2-65.

Rakovan, John. 2006. "Word to the Wise: Mississippi Valley Type Deposits" *Rocks and Minerals* 81, no. 1 (Jan/Feb): 69-71.

Mindat (2020) reference search: Minerva No. 1 mine (Ozark-Mahoning No. 1 mine) Ozark-Mahoning Group, Cave-in-Rock, Hardin Co., Illinois, USA.

FM National meeting notice (copied from the National Newsletter, Volume 50 No.4)

FM Board of Directors Meeting

February, 13th at 9:00 a.m. MST via ZOOM

Current Directors will be invited by email.

If there are changes to Chapter Directors,
please email - President William Besse



All FM members may get an invitation to the Board meeting by emailing President Besse and letting him know.

wwbesse@gmail.com

2021 Officers

President – Vacant

Vice President – Vacant

Field Trips / Safety Officer - Reggie Rose, 4287 Parkmead Dr.
Grove City, Ohio 43123
(614)875-2675 vpfieldtrips@fommidwest.org

Secretary – Frank Konieczki, 50355 W. Huron River Dr.
Belleville, Michigan 48111
(734)-699-3321 secretary@fommidwest.org

Treasurer - Jeff Spencer, 4948 Beechwood Road
Cincinnati, Ohio 45244
(513)248-0533 treasurer@fommidwest.org

Liaison Officer Randy Marsh, 6152 Old Stone Ct.
Hamilton, Ohio 45011
(513)515-7890 liaisonofficer@fommidwest.org

Fund Raising (Committee Chair) - Vacant

Newsletter (Committee Chair) Tom Bolka, 2275 Capestrano Dr.
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(937)760-6864 newsletter@fommidwest.org

Newsletter published bi-monthly in January, March, May, July, September and November. Please submit all information for publication in the newsletter by the 15th of the previous month.

Chapter Website:

www.fommidwest.org

National Website:

www.friendsofmineralogy.org

Affiliations:

THE MINERALOGICAL RECORD
THE MINERALOGICAL SOCIETY OF AMERICA
AMERICAN GEOSCIENCES INSTITUTE
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Our purpose is to organize and promote interest in and knowledge of mineralogy; to advance mineralogical education; to protect and preserve mineral specimens and promote conservation of mineral localities; to further cooperation between amateur and professional and encourage collection of minerals for educational value; and to support publications about mineralogy and about the programs of kindred organizations.

