

Midwest





TREASURERS REPORT

At this time, we are taking registrations for 2022 memberships. As of 12/15, 18 members have signed up. No formal 2022 program events are scheduled yet, but there is hope that we can begin resumption of normal activities in 2022. See page 13 of this newsletter for the year end club's financial report.

Dues are \$20.00 and the procedure is the same as it has been in the past. You can find the registration form at the end of this newsletter and here at: <u>http://www.fommidwest.org/registration-forms/</u>

Jeff Spencer – Treasurer Friends of Mineralogy Midwest Chapter Treasurer@fommidwest.org

THE 40TH TUCSON MINERAL SYMPOSIUM MINERALS OF THE APATITE SUPERGROUP AND MINERAL **FLUORESCENCE** DANIEL E. HARLOV Apatite and fluids: pseudomorphism, mineral inclusions, and mineral formation." (remote talk from Europe) JOHN RAKOVAN "The Sauberg Mine, Type locality of fluorapatite, and the recognition of apatite as a distinct mineral species MADELINE MURCHLAND* AND JOHN RAKOVAN "Fluorescence spectroscopy of apatite. **EVAN SMITH** "Decoding the colors and patterns of fluorescence in Diamond." PETER MEGAW "The apatite supergroup minerals from Mexico." MARKUS RASCHKE "The fluorescence of scheelite from Xuebaoding, Sichuan Province, China." **RAY GRANT** 'Vanadinite in Arizona.' **BILL STEPHENS** "Pyromorphite from the world-famous Phoenixville District lead mines, Chester County, Pennsylvania" THOMAS LOOMIS "Apatite occurrences in the Black Hills, South Dakota." NICOLAS HEBERT "Orange fluorescent minerals from Mogok: from the scapolite – feldspathoid bearing marbles to hackmanite." (remote talk from Perth) GLENN WAYCHUNAS*, GEORGE ROSSMAN, AND MICHAEL GAFT "Electronic defects as activators of luminescence in minerals: overview and examples of novel fluorescence and tenebrescence.

FEBRUARY 12, 2022 • TUCSON CONVENTION CENTER, TUCSON, AZ



Anne Duncan Cook

August 2, 1928 ~ October 30, 2021 (age 93)

Anne Duncan Cook (nee Johnson) was born 2 August 1928 in New York City to Stanley Todd Johnson and Dorothy Elizabeth Duncan Johnson and grew up in Queens. She graduated from Oberlin College in Oberlin, Ohio where she met her future husband, William Riley Cook, Jr.

Anne and Bill settled in the Cleveland suburbs where they were blessed with four children: William Riley Cook III of Littleton, Colorado, with his wife, Joanna Baily Cook; Elizabeth Graham Cook of San Jose, California, with her husband David Friedman and their two children, Rebecca and William; Barbara Duncan Cook of Canterbury, New Hampshire, and Susan Graham Cook of Madison, Wisconsin, with her wife, Karyn Joy Graham, and their daughter Ana Gabriela Graham Cook. More recently Anne has lived at Judson Park where she has been active in the life of that community.

After her marriage, Anne, having majored in mathematics at Oberlin, worked for AT&T long lines as a calculator and later tutored students in mathematics for many years. Anne was a member of Plymouth Church of Shaker Heights, playing in the bell choir, singing in the chancel choir, and she and Bill frequently served as greeters. Anne and Bill were active in educational investment clubs, often leading classes to help others become more knowledgeable in handling their personal resources.

They were enthusiasts in studying and collecting minerals and led classes for community groups along with mentoring those new to the hobby.

Anne was also active in Meals on Wheels for more than 30 years, helping organize and deliver meals as well as serving the board. Both Anne and Bill strongly supported education throughout their lives, anonymously providing support to encourage youth to attend college or professional training.

Anne was a gracious, giving person, and her sharp intelligence and generous spirit will be greatly missed by family and friends.

A Funeral Service to celebrate her life was be held at Plymouth Church of Shaker Heights, 2860 Coventry Rd., 44120 on Thursday, November 18th at 4 PM and was also a live broadcast on Plymouth Church's live link (www.plymouthchurchucc.org/livestream).



Friends of Mineralogy, Inc. Midwest Chapter Annual Business Meeting Minutes- November 20, 2021 Virtual & Teleconference Meeting

Liaison Officer Randy Marsh welcomed those who attended the meeting.

<u>Called to order</u> by Liaison Officer Marsh at 2:05 PM, after declaring a quorum. Eight 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: Clyde Spencer; Johan Maertens; Tom Bolka; Janet Clifford; Ken Bladh. Field Trips/ Safety Officer Reggie Rose was unable to attend the meeting.

The following items/topics were presented and discussed:

Approval of Previous Meeting Minutes:

Liaison Officer Marsh asked if any corrections to the November 14, 2020 meeting minutes that were published in the January-February 2021 newsletter were necessary. No changes to the minutes were suggested or adopted by the attendees. A motion was requested and made to accept the minutes as published, and the motion was passed by unanimous vote. (Maertens/Spencer/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.

Officer Reports:

Treasurer's Report: Treasurer Jeff Spencer stated that there has been \$660 income in 2021, including dues received from two new members, and that brings the current total to 89 members. The expenses for the year have been limited to insurance and website fees. The account balance is approximately \$100 short of last year's ending balance, but the chapter is in good financial condition, and Treasurer Spencer expects 2022 dues paid in 2021 will result in a net increase by year's end. Jeff indicated that Frank Konieczki completed the 2020 financial audit. Clyde Spencer suggested contacting the insurance company to possibly negotiate a reduction in insurance charges because of a decrease in membership and a lack of field trips in 2021. Treasurer Jeff Spencer said he would review the policy prior to making any possible contact. Discussion of the possibility of online registration began (see New Business).

Liaison Officer: Liaison Officer Randy Marsh noted that communications with National have improved considerably since changes in leadership took place. Virtual meetings are now allowed, which makes communication easier. The symposium that National led in collaboration with other organizations may be resuming. There is ongoing discussion of changing the FM logo, including the possible elimination of the mineral cluster that is part of the current logo, but no final decision has been reached.



Secretary: Secretary Frank Konieczki indicated FM Midwest hopes to have an educational table at the 2022 Greater Detroit Gem, Fossil and Mineral Show. The table FM was slated to have at the 2021 show was eliminated by the organizers because the display and educational areas were downsized, owing to pandemic concerns.

Newsletter Editor Tom Bolka thanked the members for providing material for the newsletter, and he indicated any new material or comments about changes to the newsletter format are always welcome.

Old Business:

Clyde Spencer asked about the prior approval of purchasing equipment for field trips. Jeff Spencer confirmed that two hand-held radios were purchased in late 2019 for communication in quarries, but they have not been used to date because of the hiatus in field trips caused by the pandemic. He confirmed that he currently has the radios. Jeff noted the field trip officer should have the radios at the field trip sites, which might create logistical issues when Field Trips/Safety Officer Reggie Rose is not able to attend a trip, so another pair of radios may need to be purchased in the future.

New Business:

First, the matter of resuming annual member dues was discussed, and the consensus was that the prior dues amount of \$20 per individual was appropriate. The aforementioned proposal was brought to the floor as a motion and it passed unanimously (Konieczki/RMarsh/P).

The topic of online registration was discussed. Jeff Spencer observed that the constitution or by-laws would have to be changed to accommodate online payment, but the process might be attractive to many members. He indicated that PayPal fees for registration would be \$.88 per \$20 registration. Janet Clifford stated it might be a good idea to get input from members through the newsletter, and Jeff Spencer responded that he has already had numerous inquiries from members. Subsequently, a motion was made to set up a PayPal account for online registration. The motion was passed unanimously (Maertens/Bolka/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. Secretary's Note: the former position of Vice President- Field Trips is now titled Field Trips/Safety Officer. The floor was opened for nominations, including any volunteers for the currently vacant president and vice president roles. There were no volunteers for the vacant positions, so 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 unanimously approved (CSpencer/JClifford/P). Subsequently, Liaison Officer Marsh indicated that he or other officers would be happy to continue to chair meetings because of the President and Vice President vacancies.

For the Good of the Order:

Janet Clifford indicated she was sad to inform the attendees that longtime FM Midwest member Anne Cook passed away on October 31, 2021. Janet also indicated that the Cleveland Micromineral Symposium will very likely not be held at the Cleveland Museum of Natural History in 2022, owing to the retirement of the geology



Page 5

and mineralogy department head. It is possible that event could be held at the retirement community that hosted the event several years ago.

Clyde Spencer indicated that Terry Huizing gave a recent talk on Midwest geodes for the Dayton Gem and Mineral Society and stated that he was selling a portion of his collection. Anyone who is interested should contact Terry directly. Jeff Spencer noted that Terry had 10 to 12 flats for sale at the Detroit show.

Johan Maertens indicated he will be working at the 2022 GeoFair, and since he will already be working for the Cincinnati club, Johan said he is willing to set up a FM Midwest table. He will provide a notice to be included in the newsletter regarding requests for volunteers and donation of specimens. Treasurer Spencer suggested that the chapter have a business meeting at the show (as has been done several times in past years).

Liaison Officer Randy Marsh suggested that anyone who has connections with academia is encouraged to have their contacts get in touch with him regarding possible programs. Names suggested were Chris Stefano, who currently lives in Arizona, but who has Midwest connections, and John Rakovan at Miami University. The latter was mentioned in relation to possibly resuming the FM Midwest Symposium. Johan Maertens suggested that having a virtual option for the symposium might be a good idea and bolster attendance. He noted that the Rochester Symposium this year was entirely online, and he suggested this may be the wave of the future. Randy suggested multi-organizational, cooperative programs might be possible since many clubs have small nuclei of passionate volunteers, and Johan cited the Cleveland micromineral contingent as a good example of such volunteers.

There was general discussion about the FM Virginia Chapter, which focuses on electronic communications and resources, rather than emphasizing field trips.

Liaison Officer Marsh thanked all attendees for joining the meeting to benefit the Chapter.

A motion to adjourn was entered and passed. (JSpencer/Clifford/P).

Meeting adjourned: 3:25 PM.

Respectfully submitted by Frank Konieczki, Secretary



Fluorescent Aragonite within Certain Metamorphic Rocks by, Calvin Harris

Introduction

The fluorescence and phosphorescence of aragonite has received the attention of many who seek knowledge of mineral luminosity. As a result, there are several publications that contribute toward understanding this phenomenon. Although there have been studies concerning the properties of aragonite in different rock types, less attention has been given to its luminescent characteristics as it formed in metamorphic rocks. This study examines the luminescent features of aragonite within marble from the Long Lake Zinc mine, Desert View mine and altered carbonate material from White Knob quarry. These rocks include minerals that can have an equal or higher degree of luminosity than the aragonite. However, this does not mean that the aragonite is any less interesting. The techniques employed not only allow assessment of fluorescence and phosphorescence generated by aragonite, but can also reveal phosphorescence when not anticipated.

Geological Settings

The Long Lake Zinc mine formed when calcitic metasediment deposits within the Grenville Province were subjected to regional metamorphic activity, involving high temperatures and pressure.

The Desert View mine is situated within Bonanza King Formation dolomite that was altered through contactmetamorphic activity.

The White Knob quarry is situated in a metamorphosed miogeoclinal carbonate rock that was transformed by plutonic intrusion.

Specimen Descriptions

Four samples from Long Lake Zinc mine measure from cabinet to large cabinet specimen sizes. The colors range from light gray to almost pure white. Fluorescent minerals such calcite, diopside, norbergite and other related members of the Humite group minerals may be present.

Two samples each from the Desert View mine and White Knob quarry were selected. They range from cabinet to large cabinet specimen sizes and others minerals including wollastonite and calcite are present within these specimens.

Test Procedures

Four ultraviolet wavelengths shortwave, 254nm; mid-wave, 312nm; longwave, 350nm and longwave 270nm were used to determine the luminosity characteristics of the specimens. The sources of this radiation were placed 1-2 inches from each sample to determine phosphorescence and 3-4 inches to assess fluorescence.

As in all cases, evaluation should begin by observing phosphorescence because it eliminates the need for eye sensitivity adjustment when first viewing fluorescence.

The exposure time needed for observing phosphorescence in the Long Lake Zinc mine specimens were some 30 seconds, while the Desert View mine and White Knob quarry specimens required approximately 10 seconds.



Test Results for Long Lake Zinc Mine Specimens

Specimen ID	Shortwave	Mid-wave	Longwave (350nm)	Longwave
	(254nm)	(312nm)		(370nm)
ch2007031fl	fl: Bright	fl: Similar	fl: Bright intensity,	fl: Bright
	intensity,	to SW.	whitish-blue veins.	intensity,
	powder-blue	phos:	phos: Very weak	white color
	color veins.	Similar to	intensity, gray	veins. phos:
	phos: Weak	SW, except	color throughout, 2	Lower
	intensity,	3 second	second duration.	intensity
	blue-gray	duration.		than
	color, effect			350nm, dull
	throughout,			gray
	1-2 second			throughout,
	duration.			1-2 second
				duration.
ch2008169fl	fl: Mod-	fl: Similar	fl: Vein, moderate-	fl: Similar
	bright	to SW.	bright intensity,	to 350nm,
	intensity,	phos:	white coloration.	except
	powder-blue	Moderate-	Small areas, bluish-	small areas
	color vein.	weak	gray color,	slightly
	phos: Weak	intensity,	moderate intensity.	brighter.
	intensity,	blue-gray	phos: Very weak	phos: Very
	blue-gray	color, 5	intensity, blue-gray	weak
	color, 4-5	second	color, 1-2 second	intensity,
	second	duration.	duration.	gray color,
	duration			1-2 second
	~	~		duration.
ch2007131fl	fl:	fl:	fl: Similar to MW,	fl: Slightly
	Indeterminate	Moderate-	except cream	brighter
	due to effects	bright	w/blue color more	than
	from other	intensity,	saturated. phos:	350nm.
	minerals.	cream with	Very weak	phos:
	phos: Weak	blue tint	intensity, gray	Extremely
	intensity,	coloration.	color, 2 second	weak
	gray color	phos:	duration.	intensity,
	throughout, 4	Similar to		gray color,
	second	SW except,		1-2 second
	duration.	weaker		duration.
		intensity, 3		
		second		
		duration.		



ch2007080fl	fl. Anagomita	fl: Veins	fl: Similar to	fl: Similar
cn200708011	fl: Aragonite			
	not detected	and patches	312nm, except	to 350nm,
	due to other	display	veins and patches	except
	fluorescent	moderate-	more distinct. phos:	slightly
	effects. phos:	bright	Low intensity,	brighter.
	Moderate-	intensity;	whitish-gray color	phos: Very
	low intensity,	other areas	bleeds in areas, 3	weak
	bluish-gray	show	second duration.	intensity,
	color, 4	moderate		white w/
	second	intensity		gray tint
	duration.	light-gray		veins
		coloration.		spanned
		phos:		across
		Similar		specimen; 3
		intensity		second
		and color		duration.
		as 254nm,		
		5 second		
		duration.		

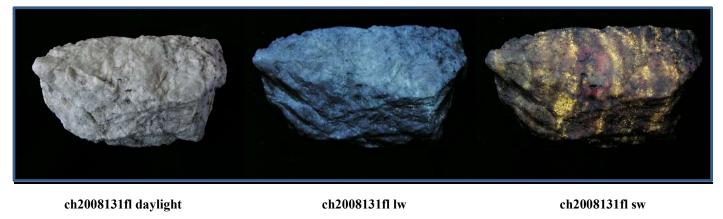
Long Lake Specimen Photo's



ch2008169fl daylight

ch2008169fl lw

ch2008169fl sw





Page 9

Volume 37 No.1

January – February 2022

Test Results for Desert View Mine Specimens

Specimen ID	Shortwave	Mid-wave	Longwave	Longwave
specificit ID	(254nm)	(312nm)	(350nm)	(370nm)
ch2007129fl	fl: Mod-	fl: Moderate-	fl: Similar to	fl: Similar to
cn200/12911				
	bright	bright,	312nm. phos:	350nm. phos:
	intensity,	yellowish-	Intensity and	Moderate
	blue-green	green color.	color less	intensity,
	color in	phos:	pronounced	yellowish-
	sections.	Moderate	than 312nm,	gray color
	phos:	intensity,	4-5 second	throughout, 5
	Moderate	blue-green	duration.	second
	intensity,	throughout, 5		duration.
	blue-green	second		
	coloration	duration.		
	throughout, 4			
	sec. duration.			
ch2007113fl	fl: Moderate-	fl: Area of	fl: Intensity,	fl: Similar to
CI1200711311	bright	bright	color similar	350nm. phos:
	intensity,	intensity,	to 312nm,	Moderate-
	blue-green	white w/	except less	low intensity,
	color. phos:	powder- blue	blue	lime-green
	Bright	tint+ areas of	saturation.	color
	intensity +	moderate	phos:	throughout;
	areas of	intensity, tan	Intensity,	one area
	moderate	color w/	color similar	slightly
	bright	bluish tint.	to 254nm, 5	brighter than
	intensity,	phos: Similar	second	other areas, 6
	blue-green	to 254nm, 6	duration.	second
	color, 7	second		duration.
	second	duration.		
	duration.			

Desert View Photo's



ch2008129fl daylight

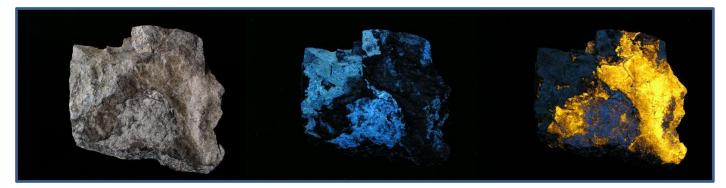
ch2008129fl lw

ch2008129fl sw



Volume 37 No.1

January – February 2022



ch2008113fl daylight

ch2008113fl lw

ch2008113fl sw

Test Results for White Knob Quarry Specimens

ch2015062fl	fl: Moderate- low intensity; blue-green w/ gray tint. phos: Moderate intensity, blue-green throughout color 6 sec. duration.	fl: Moderate bright intensity, cream w/bluish tint. phos: Moderate intensity, blue color throughout (similar to scheelite) 7 second duration.	fl: Moderate- bright intensity, cream w/bluish tint color. phos: Weak intensity, blue-gray color throughout, 2-3 second duration.	fl: Similar to 350nm. phos: Very weak intensity, color indiscernible 3 second duration.
ch2007153fl	fl: Moderate intensity, blue-green color (in sections). phos: Moderate- bright intensity, blue-green color throughout, 6 second duration.	fl: Moderate- bright intensity, cream w/slight blue coloration. phos: Similar to 254nm.	fl: Intensity similar to 312nm, cream coloration. phos: Moderate- low intensity, bluish-gray color throughout, 4 second duration.	fl: Moderate- bright intensity, cream coloration w/small areas of cream color w/blue tint. phos: Weak intensity, gray coloration throughout, 3 second duration.



Observations and Findings

The methods used for this study isolated the luminescent responses of aragonite and while the timing and distance measurements were approximate, meaning observation was possible to determine differences in color and intensity, as well as, the duration of phosphorescence. Mid-wave and longer wavelengths proved useful toward observing the luminescent effects of aragonite because of the diminished response of other minerals to these wavelengths.

The most interesting finding was that phosphorescence occurred throughout the areas of the specimens and not limited to areas where fluorescence was evident. Rocks can have micro-cracks which serves as pathways for luminescent activators to migrate, which could account for the phosphorescent response. However, the correlation between fluorescence and phosphorescence was atypical and a study is needed to understand this characteristic.

Additionally, an investigation is needed to determine why the Long Lake Zinc mine samples needed much greater exposure time to generate phosphorescence that normally required for observation. Moreover, the considerable difference in intensity between fluorescence and phosphorescence in the Long Lake Zinc mine samples is unusual for aragonite. Low intensity and diminished color saturation could possibly be attributed to low concentrations of activators, but these qualities were not observed in fluorescence.

Interesting outcomes have been highlighted by this study. While the phosphorescent characteristics of these specimens may not meet the desired visual display of many mineral collectors, investigating these features will provide a deeper understanding of the effects caused by ultraviolet radiation.

Selected References

Brown, Howard J. "Geology and Fluorescent Minerals at the Omya White Knob Quarry, Lucerne Valley, California" 2011. <u>https://files.isgs.illinois.edu/sites/default/files/files/publications/ofs2011-02-1030.pdf</u>. Un-paginated.

Deer, William A., Robert A. Howie, J. (Jack) Zussman. *An Introduction to Rock Forming Minerals, 3rd. Ed.* 2013. The Mineralogical Society, London. pp. 468-470.

Leavens, Peter B., Jimmie D. Patton. "The Desert View Mine". 2018. *Axis*, vol. 4., no. 1, pp. 1-13. <u>www.MineralogicalRecord.com</u>.

"Long Lake Zinc Mine, Frontenac County, Ontario, Canada". mindat. 2021

Robbins, Manuel. *Fluorescence: Gems and Minerals Under Ultraviolet Light*. 1994. Geoscience Press, Inc., Phoenix, AZ 1994. P. 207.

Schneider, Stuart. "Collecting Fluorescent Minerals, 2nd. ed. 2010. Schiffer Publishing, Ltd., Atglen, PA. pp. 155-156.

Verbeek, Earl R. "Fluid Flow in Metamorphic Rocks, Part 1". 2012. *The Picking Table*, vol. 53, no.2, Fall 2012, pp. 13-16.



Friends of Mineralogy Inc Midwest Chapter	2021 YTD	
2021 Interim Financial Statement - 12/15/21	Amount	Notes
Beginning Account Balance	\$8,557.77	
2021 Dues Amt. Received	\$40.00	
2022 Dues Amt. Received	\$360.00	
Total Dues Amt. Received in 2021	\$400.00	
Total Symposium Donations	\$65.00	
Fund raising	\$0.00	
General Fund donations	\$455.00	
other income	\$0.00	
Total Non-Dues income	<u>\$520.00</u>	
Total Income	\$920.00	
Total Symposium expenses2020 Swap table - expenseCMS Show Educational Exhibit awardWeb domain registration, security and hosting2021 insurance paymentNational Dues payment 0Total National Dues PaidTotal Disbursements2021 Surplus/ShortfallCurrent Account BalanceNational Dues Credit	\$0.00 \$0.00 \$107.88 \$650.00 <u>\$0.00</u> \$0.00 \$757.88 \$162.12 \$8,719.89 \$328.00	waived

2021 extended 2020 memberships 87 2021 new members 2 2021 membership gain(loss) 2 2022 members registered 18



FRIENDS OF MINERALOGY, INC. Midwest Chapter APPLICATION FOR MEMBERSHIP MEMBER DATA SHEET

Name Address	Last First Middle Initial	
Add 033	Street City or Town	
	State Zip/Postal Code	
Telephone Number	(Home)	(Office/cell)
E-mail address		
Would you be willing to serve as an	officer or committee member/chair?	
Would you be willing to serve in and	other volunteer capacity?	
How did you find out about Friends	of Mineralogy?	
I affirm that I support the purposes* of	f Friends of Mineralogy:	
Signature	Date	
Additional donations: Annual Symposiu General Fund \$ Total (including Dues \$ *		
1. To promote interest in and knowled	ge of mineralogy.	
2. To advance mineralogical education.		
3. To protect and preserve mineral spe	cimens and promote conservation of mineral l	ocalities.
4. To further cooperation between ama	ateur and professional and encourage collection	on of minerals for
educational value.		
5. To support publications about miner	alogy and about the programs of kindred orga	inizations.
Jeff Spencer, Treasurer Friends of Mineralogy, Midwest Chapt 4948 Beechwood Rd., Cincinnati, Ohio		



Friends of Mineralogy Midwest Chapter Field Trip Waiver/Hold Harmless Agreement

1.0 I,

_____, desire to participate in Friends of Mineralogy Inc. Midwest Chapter ("FMMC")

(please print full name of participant) field trips/activities ("Activity"). I fully understand and appreciate the dangers, hazards and risks inherent during any Activity, in the transportation to and from the Activity, and in any independent research or activities I undertake as an adjunct to the Activity, which dangers include but are not limited to serious and mortal injuries and property damage.

2.0 Knowing the dangers, hazards, and risks of such Activity and research, and in consideration of being permitted to participate in the Activity and research, on behalf of myself, my family, heirs, assigns, my estate and anyone claiming through me, release waive, forever discharge and covenant not to sue FMMC, it's officers, directors, members, agents or third parties (hereafter called the "Releasees") connected with the FMMC Activity of any and all claims, loss, injury, damage, demands, actions, causes of action, costs, and expense of every nature, known or unknown for damage to personal property, personal injury, death, as well as any emotional or psychological harm, or damages or loss of reputation, employment, contract, property rights and due process.

I further agree to assume all the risks and responsibilities known or unknown surrounding my participation in the Activity, including transportation to or from, or any independent research or activities undertaken as an adjunct thereto. I understand the activities have inherent risks and I understand those risks and assume responsibility to protect myself from those risks and acknowledge that FMMC cannot foresee all risks and hazards.

3.0 I understand and agree that Releasees do not have medical personnel available at the location of the Activity. I understand and agree that Releasees are granted permission to authorize emergency medical treatment if necessary, and that such action by Releasees shall be subject to the terms of this agreement. I understand and agree that Releasees assume no responsibility for any injury or damage which might arise out of or in connection with such authorized emergency medical treatment.

4.0 In signing this Release, I acknowledge and represent that I have fully informed myself of the content of the foregoing waiver of liability and hold harmless agreement by reading it before I sign it, and I understand that I sign this document as my own free act and deed; no oral representations, statements, or inducements, apart from the foregoing written statement have been made. I understand that the corporation (FMMC) does not require me to participate in this Activity, but I want to do so, despite the possible dangers and risks and despite this Release. I further state that I am at least eighteen (18) years of age, and fully competent to sign this Agreement – and that I execute this Release for full, adequate, and complete consideration fully intending to be bound by the same. I further state that there are no health-related reasons or problems which preclude or restrict my participation in the Activity, and that I have adequate health insurance to provide and pay for any medical costs that may be attendant as a result of injury to me.

5.0 I further agree that this Release is in effect in perpetuity once executed, unless revoked in writing and shall be construed in accordance with the laws of the state in which FMMC is incorporated, Ohio. If any term of this provision of this Release shall be held illegal, unenforceable, or in conflict with any law governing this Release, the validity of the remaining portions shall not be affected thereby.

IN WITNESS WHEREOF, I have executed this Re-	elease this	day of the month of	, 20
Participant Signature:			
Address:	,	, ,	_,
Street City State Zip Code			
Phone (with area code):	email:		
Emergency Contact:		_ Phone (with area code):	
Witness Signature (must be at least 18 years old):			



2022 Officers

President – Vacant

Vice President Programs – Vacant

- Vice President Field Trips/Safety Officer Reggie Rose, 4287 Parkmead Dr. Grove City, Ohio 43123 (614)875-2675 <u>vpfieldtrips@fommidwest.org</u>
- Secretary Frank Konieczki, 50355 W. Huron River Dr. Belleville, Michigan 48111 (734)-699-3321 <u>secretary@fommidwest.org</u>
- 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 <u>liaisonofficer@fommidwest.org</u>

Fund Raising (Committee Chair) - Vacant

Newsletter (Committee Chair) Tom Bolka, 2275 Capestrano Dr. Xenia, Ohio 45385 (937)760-6864 <u>newsletter@fommidwest.org</u> Newsletter published bimonthly 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 MINERALOGICAL ASSOCIATION OF CANADA ROCKS & MINERALS MAGAZINE MINERAL NEWS MINDAT

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.

