

Nittany Mineralogical Society Bulletin

Nittany Mineralogical Society, Inc., meeting in State College, Pennsylvania
Contact information on back page

Editor (see back page):

November, 2023

Visit our web site: www.nittanymineral.org

David C. Glick

November 15th meeting:
IN PERSON at BOAL HALL

Applying non-traditional stable isotopes to traditional geological problems

by Dr. Adam Ianno
Pennsylvania Geological Survey

Our November meeting will be held Wednesday the 15th in Boal Hall (Boalsburg Fire Hall), 113 East Pine St., Boalsburg, PA 16827. Maps can be found on our web site.

7:15 to 7:45 p.m.: Social "hour." We will serve some refreshments - snacks and beverages - or feel free to bring your own non-alcoholic beverage.

*7:45 to 8:00 p.m.: Announcements, door prizes.
about 8:00 p.m.: featured program*

*The event has free admission and free parking (lot just east of Fire Hall along East Pine St.), and is open to all; **parents/guardians must provide supervision of minors.** Bring your friends and share an interesting evening. We expect to record the presentation for later posting on our web site.*

Isotope geochemistry is a widely applicable field that uses measurements of isotopic ratios to diagnose and interpret many different geologic processes occurring from core to atmosphere and beyond. Much of this work is performed by measuring the ratio of different atomic masses of single elements (oxygen-16 vs. oxygen-18, iron-54 vs. iron-56) using a mass spectrometer. In this talk, I will present an introduction to what even an "isotope" is and how they came to be, the field of isotope geochemistry, and the procedures of non-traditional stable isotope analyses and apply them to geological research projects I have pursued in California, Texas, Spain, and beyond. ✨

ATTENDING THE NOVEMBER MEETING?

Donations of **one or two high quality, labeled door prize specimens** are invited.

Larger quantities can go in a giveaway box.

Bring a friend!

Annual Meeting held in October

by David Glick, NMS President

A brief annual meeting of the membership was held during the October 18th meeting. The incumbent officers were re-elected, as follows:

President	David Glick
Vice President	Bob Altamura
Treasurer	Stuart Bingham
Secretary	Barry Scheetz

David Glick presented an annual report of Nittany Mineralogical Society activities (see page 3).

Upcoming Meetings

December 13 (not Dec. 20): Holiday Dinner at Quaker Steak & Lube; sales by NMS & members (contact Bob Altamura to reserve sales space, see page 2).

Field Tour: Alexander Caverns Dec. 9

From David Glick, President

We are moving ahead with a tour of the "dry side" of Alexander Caverns near Milroy, courtesy of Bald Eagle Grotto and Ann Dunlavy of Lincoln Caverns. A poll of members interested showed a preference for Saturday, December 9th, so that is the plan. The maximum attendance is 20; there are still spots available. If you did not receive an email from me on November 7 and would like to attend, please contact me (email is best - see p. 6) and I'll send more information.

Minerals Junior Education Day Set for March 23, 2024

Please save the date to volunteer at our annual event for kids and families. Plan an educational station with souvenir giveaways, or volunteer to help at an existing one. Watch for details in the coming months. *-Editor*

Cleavable Calcite Sought

Junior Rockhounds Chair Dr. Andrew Sicree uses calcite to demonstrate mineral cleavage at his many educational projects. His stock is getting low! If you're out collecting, and see chunks of calcite over 1" that exhibit good cleavage - material you might not normally bother collecting - please pick them up for use in these educational endeavors. Or maybe you have some in that box in the corner of the basement - please bring them in.

-Editor

NMS Leaders Altamura, Sicree to speak at FM-PA Symposium Nov. 11

After having met in Lancaster, PA, since 2009, and in Media, PA, for 9 years before that, the Friends of Mineralogy - Pennsylvania Chapter Annual Symposium is moving to University of Pittsburgh-Johnstown for the first time this year. It is expanding to have an associated show open to the public, and as usual will have a field trip the next day.

Among the mineralogical presentations will be NMS's Dr. Andrew Sicree on "Minerals from Centre County: From the bottom of the quarry to the top of the Sky" and Dr. Robert Altamura on "A Model for the Cause of Iridescence in Plagioclase Feldspar and the Effect of Superimposed Polysynthetic Twinning." See the flyer below and <<https://rasloto.com/FM/whats-new/>>

The Sunday field trip will be to the New Paris quarry in Bedford County, once known for collectible fluorite as well as a variety of fossils. It is now an educational site, and fossil discoveries continue. The field trip will be led by Stephen Lindberg of UP-J, an authority on the quarry, its minerals, and its fossils. For more on the quarry, see Mindat.org, Dirtman Report on YouTube, etc. *-Editor*

Annual Holiday Dinner December 13 Quaker Steak & Lube Restaurant

We hope that you will join us! On Wednesday, December 13, 6:00 p.m., rather than our usual meeting and program, we will have our Holiday Dinner at Quaker Steak & Lube Restaurant, 501 Benner Pike (across Benner Pike from the Nittany Mall), State College, PA 16801 in their "Corvette Room" at the back of the restaurant. The entire restaurant is decorated in automotive memorabilia making the place and our event a lot of fun. There actually is a real red Corvette suspended from the ceiling above part of the Corvette Room.

NMS will pay for appetizer plates to be shared by all those present, then attendees can order and pay for their own dinners. We'll have door prizes also. We will continue our past tradition where members can have space on a table at the dinner to sell minerals / rocks / fossils / carved gems / jewelry / rock crafts. Sellers need to collect PA sales tax. NMS will charge a commission fee at 10% of the vendor's pre-tax sales. NMS will also have items for sale. If you are interested in selling, please contact Bob Altamura (raltamura@comcast.net or 814-234-5011) as soon as possible (definitely by November 30) to secure a space. *-Editor*

Rockin' in the Alleghenies - JOHNSTOWN FM-PA Annual Symposium and MINERAL, FOSSIL & GEM SHOW



Friends of Mineralogy - Pennsylvania Chapter
SYMPOSIUM & SHOW Nov.11, 2023 - Field Trip Nov. 12
Attend ONLINE -OR- IN PERSON at University of Pittsburgh - JOHNSTOWN

FIRST ANNUAL MINERAL, FOSSIL & GEM SHOW SHOW SATURDAY 8:30 - 6:00 ADMISSION FREE TO ALL 40 TABLES OF SELECTED VENDORS

SYMPOSIUM for mineral collecting enthusiasts Non-members \$ 15.00 Members \$10.00 Students free

Friday evening Nov. 10: Meet & Greet - bring your mineral specimens to talk about.

Saturday Nov. 11: Hybrid Symposium - **ONLINE** or **IN PERSON**

8:00 a.m. to 5:00 p.m. at University of Pittsburgh - Johnstown

Seven talks by knowledgeable **SPEAKERS** concentrating on **Pennsylvania Mineralogy & Geology** and more:
Gypsum Occurrence in the Vanport Limestone, Lawrence County, PA - by William Kochanov, PG
Minerals from Centre County: From the bottom of the quarry to the top of the Sky - by Dr. Andrew Sicree
A Model for the Cause of Iridescence in Plagioclase Feldspar and the Effect of Twinning - by Dr. Robert Altamura, PG
Geology & Mineralogy of the New Paris Quarry with Emphasis on Structural and stratigraphic relationships as assessed using Modern Mapping Techniques - by Bill Stephens, PG, and Stephen R. Lindberg
The Geochemistry and Petrology of the Bald Hill Bentonites in SW PA - by C Howard, A Schreckengost, Dr. R Kerrigan
Insights from phosphatic conodont fossils recovered from a Silurian-Devonian inland sea...New Paris quarry...PA - by C. Coughenour & S. Lindberg
Examining Mineral Fluid Inclusions to Assess the Economic Potential of Allegheny Hydrothermal Systems - by Aleya Schreckengost

Silent Auction – Give-away Table – Meet Fellow Collectors - Rock Giveaway by UP-J
Professional Geologists: Six Professional Development Hour credits available for full lecture attendance

FIELD TRIP Sunday Nov. 12 New Paris Quarry. Open only to symposium registrants. Register now!

Visit our web site for details, registration form, changes and updates: www.rasloto.com/FM

Nittany Mineralogical Society President's Annual Report 11/2022 - 10/2023

by David Glick, President

NMS held nine in-person meetings, an official holiday dinner, two social dinners, and a picnic during the year. We had mixed success in sending meetings out via Zoom, and far fewer participants on Zoom than last year, so the Board decided not to renew our Zoom license. We could probably do occasional sessions using EFMLS's license if needed. We are recording meeting programs, with presenters' permission, for later posting on our web site; that has proven to have its own complications. I am working on catching up on that. We are very grateful to those who make the significant effort to present meeting programs.

The Board of Directors consisted of David Glick, President; Bob Altamura, Vice president, Stuart Bingham, Treasurer; Barry Scheetz, Secretary; Duff Gold, Program Chair; Andrew Sicree, Junior Rockhounds Chair; and Dale Kephart, Field Trip Chair. Frank Kowalczyk was Minerals Junior Education Day Coordinator, Charlie Miller organized social dinners, and Jim Garthe also worked on field trips. Sincere thanks go to all of them for keeping the Society running.

The Board held three meetings during the year, on January 11, February 7, and September 12. I represented our Society at the EFMLS Convention via Zoom in July. I was asked to fill in as secretary of EFMLS for one Executive Board meeting, then another, then several more until a new Secretary took office on November 1. EFMLS is operating smoothly. Being part of that hard-working group was rewarding, but I'm glad to be back to more local NMS and Friends of Mineralogy - Pennsylvania Chapter responsibilities.

Treasurer Stuart Bingham has provided the following Financial Report as of August 31: checking \$4,057.69, money market \$17,997.35. The remainder of the John Passaneau bequest was moved from Citizens Bank to a CD at Kish Bank which is now earning over 5%. Thankfully, we are finally back to filing the very simple "electronic postcard" Form 990-N with the IRS.

The editor produced ten Bulletins as usual; thank you to those providing material. We did not get a membership directory distributed, but do plan to do that in the next few months.

We had a successful collecting trip to Huntingdon County for chert; thanks go to Jim Garthe and Dale Kephart for that. We appreciate Mike Dunton's efforts to have our members be invited on some trips by other clubs.

Our fluorite display at Penn State's Earth & Mineral Sciences Museum and Art Gallery has been up for over a year (through various renovations and closures), so it's time to be working on a new display. It was in place for the delayed 125th Anniversary activities of the College. Many thanks go to Julianne Snider and Patti Wood Finkle for their help with multiple aspects of the display. After extended interviewing, the Museum has a new director, Dr. Chris Widga, and we look forward to working with him. I continue to serve on the Museum's Advisory Board.

We've received several donations, both of cash and of materials. Barry Scheetz donated a microscope which I've tuned up and is now working pretty well; we just picked up a carload of minerals and fossils from Shirley Fonda, with more to come; Louis Sabo donated rocks and minerals; Mike Stickles donated lapidary material.

Looking forward, we are set to have the usual December holiday dinner & sale on December 13, a week earlier than the usual meeting date. We are looking for meeting programs for 2024; suggestions are welcome. Minerals Junior Education Day is set for Saturday March 23, 2024, so it's time to start thinking about volunteering for that. We will plan to have some field trips. We'll work on the next museum exhibit, and we'd like to provide exhibits in schools, if there are opportunities. We have a huge amount of donated material in storage, and we will continue to organize and categorize it, for teaching, exhibits, door prizes, giveaways, donations, and sales. A "garage sale" where both the Society and the members could sell would be very useful, if we can find a good venue for that.

I'll conclude with our annual plea:

The Board truly needs **additional volunteers** to get involved with running the Society, providing **new energy and fresh thinking** and some new names on the ballot next time around. In many cases it would be useful to have newcomers spend some time on committees and attending Board meetings before stepping into elected office. **All members: please consider volunteering!**

FEDERATION NEWS

Nittany Mineralogical Society, Inc., 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 their monthly newsletters, which are linked from our web site, <<http://www.nittanymineral.org>>.

In the AFMS November Newsletter, Roger Burford, AFMS President 2023-2024, introduces himself. Committee chairs discuss outreach at mineral shows, the Website contest, the Scholarship Foundation, Rockhounds of the Year, safety at all types of club gatherings, and updates of rules for competitive displays and their judging. Cheryl Neary presents part 2 of a series on Ventura, California, where the 2024 AFMS Convention will be held, May 24-26. This one is about oil, which Ventura County began producing in 1860 (Pennsylvania's Drake Well only beat them by one year).

The Eastern Federation's November Newsletter begins with Federation leader Cheryl Neary's thoughts on annual conventions. She'd like to know what they could offer that might attract club members to the area and the convention. The difference between the story of a club's history and a stack of old newsletters is noted in Ellery Borow's history article. Program competitions and sharing are discussed. The safety article is about awareness.

-Editor

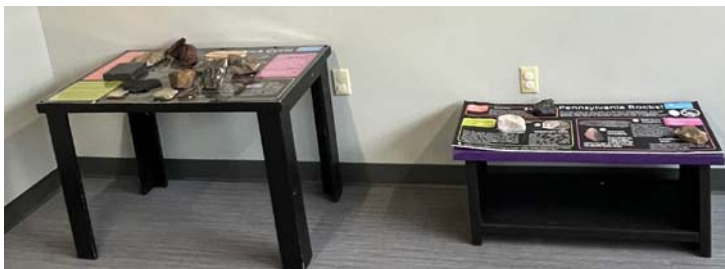
Geo-Sudoku

by David Glick

The puzzle below contains the letters ADEFGLPRS. One row or column includes a mineral group whose twinning will be discussed. If you've read this issue very carefully, you've seen it. Each block of 9 squares, each row, and each column must contain each of the nine letters exactly once. The solution is on page 6.

A		S	L	P	D	G		
					F			R
			A			S		D
G	A	F				D	L	
		E	P	F			G	
	S	R		D		F		
	G		E				D	
				S				G
	D				G			

Rock Exhibit at Discovery Space



NMS was pleased to work with Penn State grad students Charlotte Connop, Ella Do, and Paul Volante as they revamped the geology exhibit at the Discovery Space science center in State College. NMS and its members donated some specimens and provided some advice; members of the chapter of the Association for Women Geoscientists did the work.

-Editor



Ella, Paul, and Charlotte and their project.
Photos provided by Paul Volante

Crack the News - A New AFMS Newsletter for Kids

by Dennis Gertenbach,
AFMS Juniors Newsletter Editor
from AFMS Newsletter September, 2023

At this year's AFMS Convention in Billings, the inaugural issue of *Crack the News* was introduced. *Crack the News* is an AFMS newsletter written by kids for kids who love rocks, minerals, and fossils. This first issue included articles, artwork, and even a video prepared by kids and teens, ages 4½ to 16. In this issue, kids can read and learn about:

- Clinozoisite, emeralds, and jasper
- Trilobites and dinosaurs
- The Dice Mineralogical Museum
- Making a borax snowflake
- Earning the Collecting Badge

This first issue can be downloaded from the AFMS juniors website at

<https://www.juniors.amfed.org/juniors-newsletter> . The name of the juniors paper, *Crack the News*, was chosen from entries submitted by 22 kids throughout the country. *Congratulations to Rosalie Dunn, a member of the Georgia Mineral Society, who submitted Crack the News as the name for our juniors newsletter.* Because her newsletter name was chosen, Rebecca will receive a \$100 trilobite.

We plan to publish additional issues as we receive more items from kids for *Crack the News*. Information about how kids and teens can send their newsletter contributions can be found at <https://www.juniors.amfed.org/juniors-newsletter>. Please encourage the kids in your club to help make this newsletter fun for junior rockhounds across the country.



Emerald with Calcite. Concorcio Mine, Boyaca, Colombia. 1.7 x 1.5 x 0.9 cm. Rob Lavinsky, iRocks.com – CC-BY-SA-3.0 Wikimedia.org File:Beryl-Calcite-d05-4b.jpg

PA Geology Magazine

The Fall 2023 issue (Vol. 53, No. 3) of Pennsylvania Geology magazine, from the Pennsylvania Geological Survey, has some interesting and well-illustrated articles. A 'PA Geology magazine' link in the left sidebar of our web site main page at <http://www.nittanymineral.org> leads to the Survey's list of links to all issues. Chris Oest's article *Summer Camp in the Devonian—The International Symposium on the Devonian System* relates the Symposium's field trip in Pennsylvania and New York with field photos. Katherine Schmid's article on *Group Effort Rock-Core Description—How a Legacy Core Can Help Inform Today's Research* has a discussion of methods and processes used, and lots of photographs by the author of interesting fossils and minerals found in a 7,500-foot core from Allegheny County. Two are shown below, but see the article for full descriptions and many more photographs.

-Editor



Figure 3 on page 11 of the magazine. Pyrite nodule in the Tully Limestone at 7,094.1–7094.2 ft.



Figure 7 on page 13 of the magazine. Gastropod shell fragment in the Ludlowville Formation at 7,256.25 ft (about the size of the tip of a pinky nail).

UPCOMING EVENTS

Confirm details of events before attending.

<https://efmls.org/events/>

See other show calendar links on our web site.

Nov. 10-12, 2023: Friends of Mineralogy- PA Chapter Symposium, Johnstown, PA. Symposium for mineral collecting enthusiasts. Fri. eve. Meet & Greet; Sat. Hybrid Symposium - Online or In Person; Sun. field trip. See page 2 and <https://rasloto.com/FM/whats-new/>

Mar. 2-3, 2024: 60th Annual Earth Science Gem and Mineral Show, by Delaware Mineralogical Society . DoubleTree by Hilton; 4727 Concord Pike (Rt-202); Wilmington, Delaware 19803. Sat. 10-5, Sun. 11-5. www.DMSrocks.org , www.facebook.com/DEMineralShow

Geo-Sudoku Solution

A	R	S	L	P	D	G	F	E
E	P	D	S	G	F	L	A	R
L	F	G	A	R	E	S	P	D
G	A	F	R	E	S	D	L	P
D	L	E	P	F	A	R	G	S
P	S	R	G	D	L	F	E	A
S	G	A	E	L	R	P	D	F
F	E	L	D	S	P	A	R	G
R	D	P	F	A	G	E	S	L

NMS BOARD MEETING NOTICE

NMS members are invited to attend Board of Directors meetings, which are generally held at 7:30 p.m., early in the month or as decided by the Board, although we do not meet every month. The next date has not been decided. Members who would like to attend should contact president David Glick to verify time and place; those who would like to have their discussion item placed on the agenda should contact him at least one week in advance of the meeting.

INVITE A FRIEND TO JOIN THE SOCIETY

The Nittany Mineralogical Society prides itself on having among the finest line-up of speakers of any earth sciences club in the nation. Everyone is welcome at our meetings. If you'd like to be part of our Society, dues are \$25 (regular member), \$10 (student rate), \$18 (seniors), \$35 (family of two or more members, names listed). Those joining in March or later may request pro-rated dues. Your dues are used for programs and speakers, refreshments, educational activities, Bulletins, and mailing expenses. Please fill out a membership form (available at www.nittanymineral.org), make checks payable to "Nittany Mineralogical Society, Inc." and send them in as directed, or bring your dues to the next meeting.

We want to welcome you!

CONTACT INFORMATION

mailing address:

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SOCIETY OFFICERS

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Dr. Barry Scheetz (Secretary) 814-360-8241 (cell)

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Stuart Bingham (Treasurer)

e-mail: sebing145@comcast.net

OTHER CONTACTS

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Junior Rockhounds: Dr. Andrew Sicree

814-867-6263 (h) e-mail: aas132@psu.edu

Membership Chair: David Glick (see above)

Programs: Dr. Duff Gold 865-7261(o), 238-3377(h)

e-mail: dpgold33@comcast.net, gold@ems.psu.edu

Door Prizes: Dr. Bob Altamura (see above)

Facebook: John Dziak: dziakj1@gmail.com

Publicity:

The Bulletin Editor will welcome your submissions of articles, photos, drawings, cartoons, etc., on minerals, fossils, collecting, lapidary, and club activity topics of interest to the members. Please contact:

David Glick E-mail: xidg@verizon.net
425 Armagast Rd. phone: (814) 810-2116 (h)
Bellefonte, PA 16823-9762

Newsletter submissions are appreciated by the first Wednesday of the month. Photographs or graphics are encouraged, but please do not embed them in word processor files; send them as separate graphics files (good to highest quality JPEG files, about 1050 pixels wide, are preferred). Please provide captions and name of photographer or artist.

Visit us at www.nittanymineral.org