Nittany Mineralogical Society Bulletin

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

Editor (see back page):
David C. Glick

September, 2026 **Visit our web site: www.nittanymineral.org**

September 16th meeting:
IN PERSON at BOAL HALL

DUALITY DRIVEN BY QUARTZ

by Dr. Barry Scheetz

Our September meeting will be held Wednesday the 16th in Boal Hall (Boalsburg Fire Hall), 113 East Pine St., Boalsburg, PA 16827. Maps are on our web site.

7:00 to 7:45 p.m.: Social "hour," refreshments
7:45 to 8:00 p.m.: Announcements, door prizes, sales
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.

Dr. Scheetz reports, "I became interested in jasper through my connections with prominent archaeologists from the University. There is a jasper source near the intersection of Park Avenue and Orchard Road, that native Americans exploited as early as 10,000 to 12,000 years ago. Jasper is a fine-grained stone, tough and fractures conchoidally, making it ideal to fashion into spear points and arrow heads." His presentation will cover the structure and history of jasper and its relationship to quartz, chalcedony, and moganite. It will answer some questions and raise others. See the full article on page 4.

NMS at Happy Valley Maker Faire

NMS will have a booth at Happy Valley Maker Faire, to be held at Axemann Brewery, Bellefonte, on October 3-4. Bob Altamura and others will demonstrate lapidary - the ***making*** aspect of NMS - and publicize all aspects. If you'd like to help, we'll talk about it at the meeting, and you can contact Bob (see page 8). See the Maker Faire web page linked from our main page.

-Editor

ATTENDING THE SEPTEMBER 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!

JUNIOR ROCKHOUNDS MEETINGS START SEPTEMBER 16 -SEE P. 2

Help Demonstrate "Minerals that do things"

Dr. Andrew Sicree needs help staffing his "Minerals that do things" demo booth at the 60th Annual Gem, Mineral & Jewelry Show in Harrisburg scheduled for **September 26–27**, 2026. This booth does active, hands-on demonstrations of minerals for all show attendees.

Volunteers are needed for:
Saturday, September 26 10:00 a.m. – 6:00 p.m. and Sunday, September 27, 10:00 a.m. – 4:00 p.m.

Location: Zembo Shrine Auditorium, 2801 N. 3rd Street, Harrisburg, PA 17110.
Volunteers get free admission to the show. Also, volunteers get to pick a free mineral from Dr. Sicree's show volunteer mineral collection.

Please email Dr. Sicree at aas132@psu.edu if you'd like to help. We will provide volunteer orientation for the booth when you arrive. Volunteer for one hour or two or for the whole show. For more details, contact Dr. Sicree at 814-867-6263 or 814-380-7786 or email aas132@psu.edu

—Sign up now—

Landscapes & Geology Tour Friday, October 23

Bob Altamura is planning to lead another variation on his regional tour to view geology and landscapes and consider how they have affected human habitation and accomplishments. **We are waiting for final approval** from the Bureau of Forestry to hold this group event, but we anticipate that permission will be granted. *Continued on page 2*

Rhoneymeade Fall Festival Saturday, October 24

NMS will present a booth at the Rhoneymeade Fall Festival, covering local and regional geology, minerals, and fossils, as well as our Society activities. Volunteers to help would be very welcome! Sign up by emailing Bob <raltamura@comcast.net> or by calling or texting his cell, 814 880-6762. See their calendar at https://www.rhoneymeade.org/events/fall-festival-1

DUES DUE SOON - SEE PAGE 2

Landscapes & Geology Tour, continued

The planned trip would take a full day, including stops in Seven Mountains and Rothrock State Forest, Greenwood Furnace State Park, Bear Meadows Natural Area, Whipple Dam State Park, and more. One of the exclusive aspects of the tour is passage on an otherwise closed forest road with great views of Bear Meadows and the mountains.

It's a car pooling tour; vehicles suitable for somewhat rougher State Forest roads will be required, although we've never had a problem. Sign up for the trip now - space is limited - by emailing Bob <raltamura@comcast.net> or by calling or texting his cell, 814 880-6762. - *Editor*

NMS Picnic Fun

Thanks go to Bob Altamura for hosting our annual summer picnic on August 15. We had about a dozen people having a good time poolside in the nice weather.

DUES are DUE OCTOBER 31

by David Glick, NMS Membership Chair

Our membership year ends on October 31; dues are payable now. A dues form is included with this issue, either on paper or digitally. The form is also available at <http://www.nittanymineral.org/mem.htm>. Feel free to save a stamp and bring your form and dues to the September or October meeting. **OR**, use the PayPal connection on the web site which has been updated for the new membership year (and email the dues form).
The annual dues are: $25 regular membership; $18 seniors 65 years+; family $35; students $10. Your dues are used for programs and speakers, meeting hall rental, refreshments, outreach and educational activities, Bulletins, and mailing expenses. We look forward to your continuing membership!

Web Site Updates

by David Glick

Videos of meeting programs recorded over the past year are now up-to-date, including Dr. Peter Heaney's presentation from May and Show-and-Tell from August. They're linked from the main page or at <www.nittanymineral.org/programs.htm> .

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 the left sidebar of our web site, <http://www.nittanymineral.org>.

The AFMS newsletter (now digital only) for the month of September is available at <https://www.amfed.org/newsletter>. President Ronna Watkins recounts her visits to three regional federation conventions and the fun she's had. PR Chair Jim Brace-Thompson's article covers several tips for effective publicity. The business of the annual meeting is reported. 2025 AFMS Website Contest winners are reported. The Safety article, 'Mineral Safety,' is reprinted on page 6 of this Bulletin. The history article covers what may be a "car badge" to fit on a bumper and show AFMS membership. Rockhounds of the Year from several clubs are introduced. September 6 was Pet Rock Day and September 16 is Collect Rocks Day. A new issue of Crack the News, the juniors newsletter, was published in May.

The Eastern Federation's <https://efmls.org/> September Newsletter includes president Andrew "Rockhound's" column, reprinted on page 3. News on the 2027 Wildacres Workshop is presented; the Speakers-in-Residence will be jewelers and gemologists Claire Scragg and Eric Fritz. Registration forms for the EFMLS Convention, October 16-19 in Charleston, West Virginia, are provided. - *Editor*

Junior Rockhounds Monthly Meetings September - December, 2026

This Fall, Dr. Andrew Sicree will present monthly meetings for kids at 6:00 - 6:45 p.m. on the third Wednesday of the month (9/16, 10/14, 11/18, 12/16). They'll be at Boal Hall (Boalsburg Fire Hall), 113 East Pine St., Boalsburg PA 16827. See www.nittanymineral.org/juniors.htm

The meetings have a different topic each time, such as minerals, fossils, gemstones, geology, and dinosaurs. They include fun hands-on activities and discussions with an expert. Parents stay with their children, and may get a lot out of the meetings too! You don't have to be a member; please come out and see what it's all about.
Adults who would like to help present these programs are cordially invited to come to a meeting.
Participants are welcome to stay for the main monthly meeting of Nittany Mineralogical Society: 7:00 p.m. in the same room (except December which is our holiday dinner), featured program at 8:00 p.m.

EFMLS President's Message

from
Andrew Rockhound

EFMLS News v. 73 no. 9
September, 2026

I hope everyone has had a great summer, with lots of amazing finds and good times out collecting! I personally haven't stopped between leading trips and events almost every weekend, teaching and taking care of things here at the EFMLS.

I would like to thank Cheryl Neary and Kurt Canterbury for their hard work getting things together for the convention which is only a month and half away! The Kanawha club is hosting the EFMLS convention this year in wonderful West Virginia, and I can't wait to get down there and see it! Get signed up to attend and get your hotel booked now, we want every club to come enjoy the fun and participate...

I would also like to thank Matt and Jean Charsky for their work getting together a new compilation of EFMLS history from the last 25 years (2005-2025), to celebrate the 75th Anniversary of the EFMLS! They have compiled many of the amazing things the EFMLS and our member clubs have accomplished during that time, including recaps from past presidents and more. As part of this compilation, I am proud to bring you a special 75th Anniversary version of our logo produced for this effort -

In the last newsletter I mentioned we are working on a way to give every club access to Zoom, and we are still working to bring that to you, please bear with us as we get it figured out. I want to thank the clubs who have reached out and are excited about this, I am personally excited about it too!

Lastly, I want to thank Eileen Wimmer, our insurance rep at Brown & Brown for decades of amazing service to the EFMLS, and wish her an amazing retirement. Thank you, Eileen, it has been great to personally work with you during the last couple years.
Our new contact at Brown & Brown for getting trip & event COI's is - Anthony Morehouse
anthonymorehouse@bbrown.com (315) 671-8821.

Have a great fall everyone, see you in October!

Geo-Sudoku

by David Glick

The puzzle below contains the letters ACEIL NTUZ. I couldn't find a good word in this issue, so I went to the list of minerals and started with Z. It's a zinc - uranium - calcium mineral. Each block of 9 squares, each row, & each column must contain each of the nine letters exactly once. The solution is on page 8.

N				A			I	C
C	I				E			A
		A		I				N
		T				N	A	L
	C	L	A	N	T	I		
		N		E				U
	N				U		E	T
Z					A	C		I
T							L	Z

EARTH SCIENCE WEEK

Minerals Day October 12, 2026 https://mineralsday.org// by Mineralogical Society of America, and National Fossil Day October 14, 2026 https://www.nps.gov/subjects/fossilday/ by the National Park Service, will take place during Earth Science Week https://www.earthsciweek.org/ organized by American Geosciences Institute, October 11 - 17, 2026, celebrating the theme "Critical Minerals for a Thriving Society."
Educational materials for all ages are available on the various web sites. **Webinar information** is found at https://www.earthsciweek.org/webinars/

"The 2026 Earth Science Week theme, "Critical Minerals for a Thriving Society," highlights how critical minerals support essential needs and how the development of new technologies can affect which minerals are considered critical and how geoscience knowledge is essential for identifying, mining, refining, transporting, and using them responsibly. Geoscientists also address how mineral use impacts Earth's systems, including landscapes, water and air quality, and the global carbon cycle." *- Editor*

DUALITY DRIVEN BY QUARTZ

Dr. Barry Scheetz
Penn State

I became interested in jasper through my connections with prominent archaeologists from the University. There is a jasper source near the intersection of Park Avenue and Orchard Road, that native Americans exploited as early as 10,000 to 12,000 years ago. Jasper is a fine-grained stone, tough and fractures conchoidally, making it ideal to fashion into spear points and arrow heads. These peoples collected jasper float from the area of Park Avenue and Orchard Road, did minimal processing on site, then carried the jasper down to their camp sites along what is now called Spring Creek where it was worked into the desired final form. The Houserville Jasper is a uniform brown color with an earthy luster.

Jasper is defined as opaque, cryptocrystalline variety of quartz, valued for its vibrant colors, patterns, and historical uses as a gemstone and ornamental stone. It is a member of the chalcedony family.

Cryptocrystalline minerals are characterized by a texture where individual crystals that are so fine that they cannot seen with the naked eye or optical microscope. These crystals typically are *less than 5 microns* in diameter, making them appear as a homogeneous *glassy* mass.

Chalcedony is a mineral composed of microscopic crystals of quartz. It is a *cryptocrystalline* form of silica, typically less than 5 microns in diameter. Chalcedony has a waxy or glassy luster and comes in a wide variety of colors, including white, gray blue or brown.

This definition suggests that jasper can be categorized into two different forms: an archaeological type based on the luster and mineralogy and perhaps a lapidary type with varied colors and mineralogical composition. The mineralogical composition of jasper is routinely determined with X-ray diffraction which will identify any additional mineral phases present as well as providing information on the state of crystallinity of the mineral phases. The process of x-ray diffraction utilizes a monochromatic beam of x-rays [typically copper] that are reflected off of the individual planes of atoms in the structure. It is common practice to conduct a diffraction study on powders of approximately 1 micron in size.

The use of a powder randomizes the atomic planes of the mineral structure to insure that all will be measured. A finite number of atomic planes need to be measured to give an accurate determination of its presence. If the powders are smaller than ~1 micron the scattered x-rays will exhibit diffracted peak broadening, if larger than 1 micron, there may not be enough of the atomic planes present giving an incomplete picture of the minerals structure. The quartz in chalcedony has a size that is much smaller than the threshold size necessary to produce a recognizable x-ray diffraction pattern. The technique commonly uses x-rays but neutron scattering will also work in the same manner.

The mineralogical composition of Jaspers from the Ridge and Valley Province of the Appalachian Mountains [using x-rays] is alpha-quartz [$Si0_2$], goethite [FeO(OH) and moganite [$Si0_2$], Neutron diffraction studies of chalcedony report quartz [$Si0_2$], moganite [$Si0_2$] and various trace elements such as Fe, Cu, Ti, and Mn. Moganite is a metastable form of quartz that, given enough time, will ultimately recrystallize to alpha-quartz. The mineralogical composition of the Reading Prong jaspers, to the best of my knowledge, have not been reported in the literature.

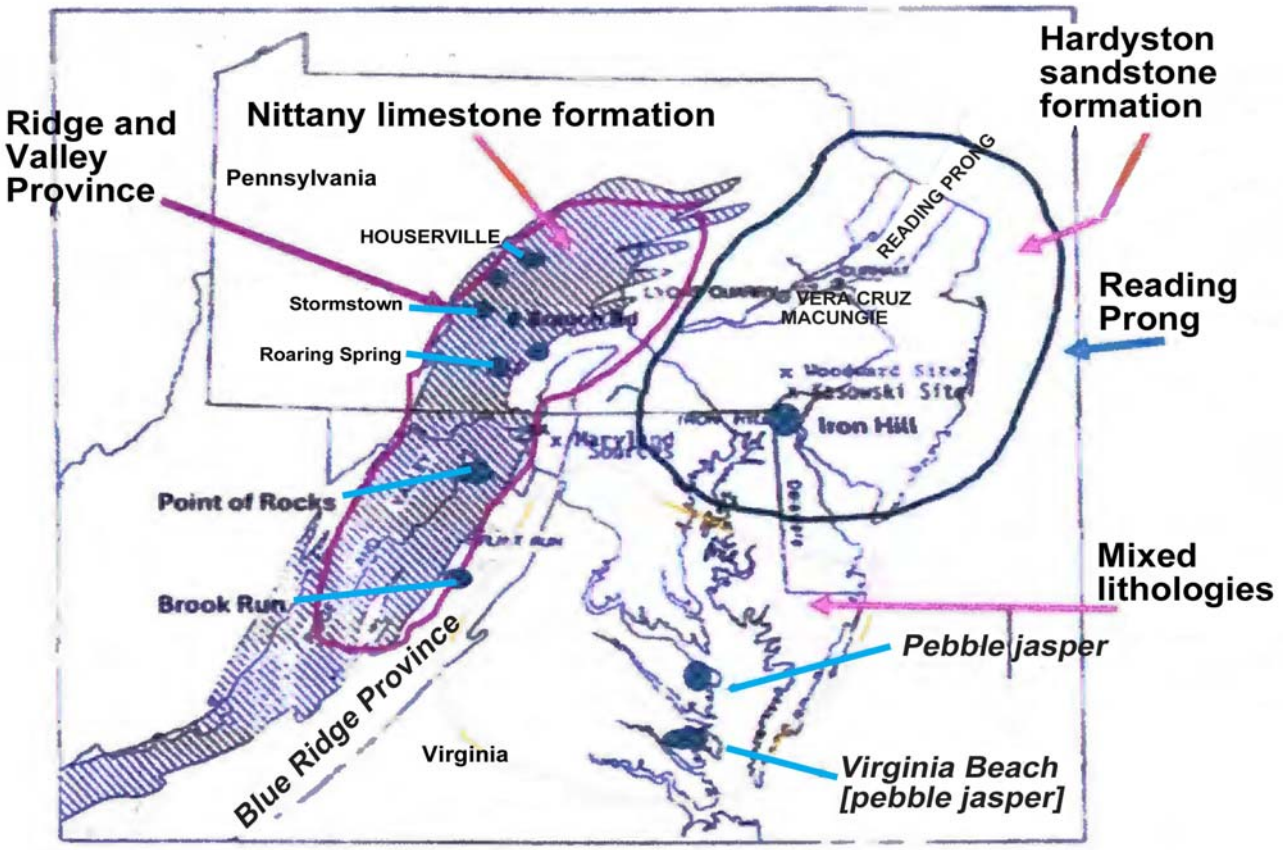
This definition of jasper would suggest that it is a mineral, but the formally accepted definition of a mineral states that is composed of a single phase. What we see is a mixture of about three phases, which defines jasper as a rock.

In quartz, the dominant atomic plane is an Si-0 bond. Since this is the predominant atomic plane, in the diffraction pattern it will have the greatest intensity. Further if all of the Si-0 bonds are the same length this scattering peak attributed to this bond will be very narrow [usually expressed as full-width-at-half-maximum]. In structures where there are other elements substituted for silica or perhaps OH substituting for some O, these different bond lengths will scatter at slightly different angles than the Si-O bond, which will manifest itself as a line broadening around the Si-O bond when measured at full-width-at-half-maximum.

The sources for archaeological jasper can generally be organized into three categories: the Ridge and Valley Province, the Reading Prong, and Maryland /Virginia. There are about ten archaeologically recognized native American quarry sites in the Ridge and Valley Province and in the Reading Prong and immediate areas including northern Delaware, interestingly. All of the sites in the Reading Prong are contained in the Lower Cambrian Hardyston sandstone formation and all of the sites in the Ridge and Valley Province are contained in the Ordovician Nittany limestone formation. We will focus this discussion on just these two clusters. The Maryland/ Virginia occurrences are contained in more varied hosts.

The mode of occurrence for the jaspers of the Ridge and Valley is generally considered to be associated with deep, perhaps near mantle, acidic hydrothermal silica-rich fluids being forced toward the surface through preexisting faults. The fluids are cooling as they approach the surface and upon contacting limestone they undergo an acid/base reaction, raising the pH and causing the silica to precipitate out of solution as alpha-quartz. Iron from the limestone is oxidized in a water-rich environment and forms goethite, FeO(OH). It is not entirely clear as to how the moganite forms, perhaps during the very initial phase of precipitation of the quartz. Physically what is observed at these sites is a feeder vein delivering the hydrothermal fluid toward the surface where at some point the pressure and temperature begin to drop and the driving force is removed, leaving the acid/base reaction to deposit the jasper. It is not necessary for hydrothermal fluid to reach the surface and, in fact, the majority of archaeological quarries occur as float after the overburden coverage of the deposit has been eroded away. The delivery vent has only been observed at three locations: Brook Run, Virginia in the Ridge and Valley; Pennington, New Jersey; and in a road cut near the Vera Cruz exit of the Northeast Extension of the Pennsylvania Turnpike in the Reading Prong.

We have no way to directly determine the placement temperature of the jasper from the Ridge and Valley Province, but the x-ray diffraction data of this jasper exhibits a very small full-width-at-half-maximum measurement, which strongly suggests that it formed at



Distribution of jasper sources, from figure 3, Miller PE (1982) Prehistoric lithic procurement: A chemical analysis of Eastern U.S. Jasper sources and a consideration of archaeological research design. Unpublished MA Thesis, The Pennsylvania State University, University Park, USA.

hydrothermal temperatures and pressures, as contrasted to chalcedony which precipitates at ambient temperatures and pressure and has an x-ray diffraction pattern typical of an amorphous material, which is a broad scattering diffraction pattern associated with the Si-0 bond. In an attempt to bracket what may be the lowest temperature that quartz could form we can look the so-called Lemont Diamonds. They are well crystallized doubly terminated crystals that formed in the Coburn/Nealmont formation which was buried to a depth of five kilometers and is presently exposed at the surface. The temperature that these crystals formed can be determined by looking at thin sections of the crystals and observing the behavior of fluid inclusions as a function of heating. The temperature of homogenization of the contents of the fluid inclusion, is the temperature at which the quartz crystallized. For Lemont Diamonds, this temperature is 309°C which corresponds to about four kilometers and a pressure in excess of one kilobar. Since the origins of the hydrothermal fluids are at these approximate depths it is reasonable to believe that 300°C and 1 kilobar pressure are the conditions for the jasper formation. Significantly different from room temperature and pressure that many authors imply.

We have generated more questions than answers:

- What events in the Early Cambrian and Ordovician were responsible for driving these hydrothermal fluids to the surface over such a large area?
- A good explanation for mechanism of formation of jaspers in the Reading Prong.
- Can a better understanding of the temperature of formation of the quartz be determined?
- How and when is moganite formed?

Mineral Safety

Ellery Borow, AFMS Safety Chair
from AFMS Newsletter, v 79 no 6, Sept. 2026

When comparing home safety and mineral safety, we in the mineral hobby have a pretty good record of safety. Statistics for home safety show quite a few incidents with cuts by sharp kitchen knives; falls in the bathroom on slippery floors, wet bath tubs, and loose bath mats; as well as home yard work with lawn mowers, chain saws, and gardening tools. We in the mineral hobby should be proud of our effort to be and stay safe.

There is one notable difference in our hobby when compared with activity in the home. Unlike the home, where most every product with which we come in contact is tested, certified, and regulated, in the mineral collecting hobby we handle all kinds of untested rocks, minerals, and interesting situations. For example, in Maine it is very interesting and rare to collect a piece of near-waterclear quartz with a small dark grain of a sand size spec in it. That tiny spec may sometimes have a halo-like area of darker quartz around it. What we have there is likely to be a tiny grain of some unknown radioactive mineral that caused the dark halo effect in the quartz. Compare that with obscure, less distinct, and rare micro-crystals of cuprosklodowskite found in Utah, New Mexico, Canada, and Zaire or larger crystals of betafite found in Colorado, California, New Mexico, Canada and Madagascar. These minerals contain uranium.

Arsenopyrite and cinnabar contain arsenic and mercury (respectively); they should be more familiar to most mineral collectors as these are highly desirable in personal collections because of their interesting and often attractive appearances. There are many other aspects of minerals which we treat respectfully – the razor sharp edges of conchoidal fractures (quartz), the splintery nature of certain mineral formations (wollastonite), the water solubility of certain minerals (halite and hanksite), the oxidation of others (pyrite), the silica dust formed when we grind certain materials (agate), the toxicity of others (certain sea shells and malachite) and so on. Because we are mineral collectors we research and learn about minerals. We learn what minerals we may find and collect in certain locations. We know when to protect ourselves from dust. We know how to protect our eyes from sharp and flying rock chips. We know certain minerals should be handled with care, and wearing gloves. We know to wash our hands after handling certain minerals. We know not to overheat some stones while working them. In other words, we are informed, we are curious, we are careful, we are respectful of the hobby we enjoy. And, perhaps most important of all, when we don't have the answers we ask questions, we share our knowledge, we share our passions, and we share our enthusiasm. Hooray for us, and thank you.

Yes, there are indeed all too many accidents in our homes. So, please be careful there as well.

Please be safe in all you do. Your home and mineral hobby safety both matter. ❄

Autumn
Mineralfest
mineral, fossil, and gem show

One hundred plus tables overloaded with minerals, fossils, crystals, geodes, gemstones, and gemstone jewelry from six continents and outer space

Saturday, 3 October 2026
8:30 AM to 3:00 PM

Macungie, Pennsylvania
Macungie Memorial Park – 50 N. Poplar Street

FREE ADMISSION and free parking
Rain or shine - over 50 indoor vendors, plus outdoor tailgate section
Family oriented - younger attendees encouraged
Darkroom for fluorescent mineral vendors and displays

ADVERTISEMENT
LAPIDARY LESSONS

Learn to carve and polish semiprecious gemstones from exotic rough rock material under the tutelage of Bob Altamura, a lapidary artist of many years. Learn to saw rocks into slabs and to transform slabs into various outlines and to shape into domed gemstones (cabochons).

Prepare an actual gemstone. Lessons includes use of lapidary machines and tools, including lapidary rock saws, grinding wheels and laps that are necessary to create gem outlines (preforms); to dome the into cabochons, and to finely polish into the finished gemstone.

Instructor will provide a wide variety of rough rock materials for the student to select for their gemstone project. If desired the project gemstone can be set in a jewelry mount available from the instructor or jewelry supply catalogs.

A 1-hour personal lesson is priced at $40. If interested contact Bob at raltamura@comcast.net or 814-880-6762.

FRIENDS OF MINERALOGY - Pennsylvania Chapter and West Chester University Earth and Space Sciences Dept.
SYMPOSIUM November 14, 2026 Field Trip Nov. 15
West Chester, Pennsylvania

For newsletters and field trips during the year, please join our chapter!
See "Join FM" on the web site

Symposium for mineral collecting enthusiasts - tentative plans include:
Saturday Nov. 14: Hybrid Symposium - ONLINE or IN PERSON
8:00 a.m. to 5:00 p.m. at West Chester University
Talks by knowledgeable **SPEAKERS** on **Pennsylvania Mineralogy and Geology and more:**
Geology of the Herkimer District - by Bill Stephens, PG, Stephens Environmental
History of Mineral Classification - by Dr. Peter Heaney, Penn State
Critical Minerals in Pennsylvania Iron Furnace Slag - by Dr. Maureen Feineman, Penn State
New Data on Mineralization at Herkimer- by David Tibbits, Rutgers
and two more to be announced

Silent Auction - Give-away Table - Conversation
Professional Geologists: 6 Professional Development Hour credits available for full lecture attendance

Sunday Nov. 15: Field Trip. Open only to symposium registrants.

Watch for details, registration form, changes and **UPDATES** on our **web site:**
www.rasloto.com/FM or **Friends of Mineralogy Pennsylvania** on Facebook

UPCOMING EVENTS

Confirm details of events before attending.
https://efmls.org/events/
See other show calendar links on our web site.

Sept 26 - 27, 2026: Annual Gem, Mineral & Jewelry Show, by Central Pennsylvania Rock and Mineral Club. Zembo Shrine Auditorium, 2801 N. Third St., Harrisburg PA 17110. Sat. 10-6, Sun. 10-4. See p.7 and https://rockandmineral.org/rock-shows/

Oct 3, 2026: Autumn Mineralfest, by Pennsylvania Earth Sciences Ass'n. Macungie Memorial Park, 50 N. Poplar St., Macungie PA 18062. Sat. only, 8:30 - 3:00. See p. 7 and https://www.mineralfest.com/mineralfest.pdf

Oct 9-11, 2026: Desautels Micromount Symposium by Baltimore Mineral Society. Contact: Mike Seeds <mseeds@fandm.edu>.

Oct 16-18, 2026: EFMLS Convention & Kanawha Rock & Gem Club annual show, Charleston, West Virginia. Show is 17th & 18th; see information at https://www.kanawharockandgemclub.org/2026-annual-show.html

Oct 31, 2026: Ultraviolation fluorescent mineral show and sale. First United Methodist Church,. 840 Trenton Rd, Fairless Hills, PA 19030. Sat only, 9:00 - 4:00. https://www.facebook.com/ultraviolation/

Nov 7 - 8, 2026: 57th Annual Gemarama, by Tuscarora Lapidary Society. Greater Philadelphia EXPO Center, 100 Station Ave., Oaks, PA Sat. 10-6, Sun. 10-5; www.lapidary.org

Nov. 14-15, 2026: Annual Fall Symposium & Field Trip, by Friends of Mineralogy - Pennsylvania Chapter. West Chester, PA. See page 7.

Geo-Sudoku Solution

N	T	U	**Z**	A	L	E	I	C
C	I	Z	**N**	T	E	L	U	A
E	L	A	**U**	I	C	Z	T	N
I	E	T	**C**	U	Z	N	A	L
U	C	L	**A**	N	T	I	Z	E
A	Z	N	**L**	E	I	T	C	U
L	N	C	**I**	Z	U	A	E	T
Z	U	E	**T**	L	A	C	N	I
T	A	I	**E**	C	N	U	L	Z

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 and form to the next meeting.

We want to welcome you!

CONTACT INFORMATION

Come to our meetings on the third Wednesday of the month - see page 1

mailing address:
Nittany Mineralogical Society, Inc.
c/o S. Bingham, Treasurer
145 Goddard Cir.
Penna. Furnace PA 16865

SOCIETY OFFICERS

David Glick (President) 814-810-2116 (h)
e-mail: xidg@verizon.net
Dr. Bob Altamura (Vice-President) 814-234-5011 (h)
e-mail: raltamura@comcast.net
Dr. Barry Scheetz (Secretary) 814-360-8241 (cell)
e-mail: se6@psu.edu
Stuart Bingham (Treasurer)
e-mail: sebing145@comcast.net

OTHER CONTACTS

Field Trips: Dale Kephart
e-mail: beckdale2@comcast.net
Junior Rockhounds: Dr. Andrew Sicree
814-867-6263 (h) e-mail: aas132@psu.edu
Membership Chair: David Glick (see above)
Programs: Dr. Duff Gold -note new home number-
814-865-7261(o), 814-353-4038(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; please send them as separate graphics files (high quality JPEG files, about 1050 pixels wide, are preferred). Please provide captions and name of photographer or artist.

Visit us at www.nittanymineral.org