# Nittany Mineralogical Society Bulletin

Nittany Mineralogical Society, Inc. P.O. Box 10664 State College PA 16805 www.ems.psu.edu/nms/

October, 2007

Editor: David C. Glick (see p. 4)

October 17th meeting:

## Ultraviolet Light and the Fluorescence of Minerals by John Passaneau

Our October meeting will be held Wednesday the 17th at 7:30 p.m., in the room 116 auditorium of Earth & Engineering Sciences Building on the west side of the Penn State campus in State College, PA.

- 6:30 to 7:30 p.m.: Social hour with refreshments in the lobby
- 7:30 to about 8:00 p.m.: Annual Meeting of Nittany Mineralogical Society, Incorporated, including election of officers; announcements; door prize drawings

about 8:00 p.m.: featured program

The event has free admission, free parking, free door prize drawings and free refreshments, and is open to all – please come and share an enjoyable evening! - - Editor

Ultraviolet light and fluorescence have long interested mineral collectors; rocks and minerals glowing in the dark, often in brilliant colors, can be very impressive. Our program will be presented by John Passaneau, who has been a collector of fluorescent minerals for many years. John will re-create the classic demonstration which separates the spectrum into its components. This shows that ultraviolet is indeed just beyond violet at the short-wavelength end of the visible spectrum. He will also discuss and demonstrate various fluorescent minerals and materials – some amusing, all interesting.

John is also an accomplished photographer, and he has included fluorescent minerals among his subjects. See page 3 for a pair of his photographs showing a fluorescent specimen from Franklin, New Jersey, "the fluorescent mineral capital of the world," in daylight and under ultraviolet light. -- Editor

#### ATTENDING THE OCTOBER MEETING?

This event is free and open to all - bring a friend! Donations of door prize specimens are invited. Your additional snacks will be welcomed.

## JUNIOR ROCKHOUNDS PROGRAMS SCHEDULED

Junior Rockhounds will meet at 7:00 p.m. on the following dates:

Tuesday, November 13, 2007, and

Tuesday, December 11, 2007.

The meetings are now planned for Room 117 in the Earth and Engineering Sciences Building (EESB), on White Course Drive off North Atherton Street, on the west side of the Penn State campus in State College, PA. - - Editor

## SCHEDULE CHANGE FOR NOVEMBER

Our regular meeting will be held a week early, on Wednesday, November 14, because our normal date would be the day before Thanksgiving. The Bulletin will also be a week early, so please be sure to have any items for the Bulletin to Dave Glick before November 7.- - *Editor* 

## Please Pay Dues Now

Our membership year ends this month, so please bring your dues payment and form to the October meeting or send them to the P.O. Box as listed on the form. Your dues are used for Bulletins and mailing expenses, insurance, Federation dues, programs, educational activities, refreshments, and operating costs. If a form is enclosed with this Bulletin, it means we have not received your payment as of early October. If you have paid in the last 10 days, please ignore the enclosed form. Thank you! - Editor

### Please volunteer: NMS Secretary NEEDED! See 'Elections' in the following article.

## **Annual Meeting on October 17**

by David Glick, NMS Secretary

The corporate Annual Meeting of Nittany Mineralogical Society, Inc., will be held at 7:30 p.m., October 17, 2007, in room 116 Earth & Engineering Sciences Building on Penn State's University Park campus in State College, PA. Election of officers, a vote on new bylaws, and other business will be conducted.

#### **Elections at October Meeting: Secretary NEEDED**

The Nominating Committee has provided the following slate of candidates for the election on October 17th:

#### **Annual Meeting / Elections**

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continued

President: David Glick Vice-President: Robert Altamura Treasurer: John Passaneau Secretary: position open, **CANDIDATES NEEDED.** 

Please consider volunteering to run for Secretary for the 2007-2008 year - contact a Board member (page 8) if you could serve. Volunteers and nominations may also be made from the floor at the October  $17^{\text{th}}$  meeting.

Current Treasurer Duff Gold, who has served on the Board for the entire 13-year history of the NMS, stated that he would prefer not to be a candidate, and "We need new blood." Volunteers and nominations are welcome, and in particular people with experience in bookkeeping and administering a non-profit organization would be valuable.

The **Secretary's** principal duties will be to serve as a member of the Board of Directors, and to record and distribute the minutes of their meetings, about once a month. The Secretary ensures that the Bulletin gets done, but is not required to do it personally at this time, as the current Bulletin Editor is willing to continue.

Non-elected positions which need to be filled include Program Chair, Publicity Chair, and Refreshments Coordinator. There are other opportunities to volunteer, including coordinating exhibits, photographing club activities, and more. Please contact one of the officers if you can help or want more information.

#### **NMS Bylaws Revisions**

Following work by the Board and input from members at the August meeting, revised Bylaws (to substitute for the existing Constitution *and* Bylaws) will be presented for vote at the Annual Meeting on October 17.

The proposed Bylaws (as well as the current ones) are available from the web site, will be available in print at the October 17 meeting, and are available on request from Secretary David Glick (see p. 4).

## Ten Years Ago in NMS

Ten years ago, NMS had just concluded hosting a successful Mineral Symposium on "Lead, Zinc, and Iron Minerals." At the regular meetings, Mike Sheasley spoke in September on "Russia II: Collecting in the Polar and Middle Urals," and Dave Glick spoke in October on "Coal: Macerals and Minerals." - *Editor* 

#### South Penn Rock Swap

The Central Pennsylvania and the Franklin County Rock and Mineral Clubs will once again collaborate on the annual South Penn Rock Swap. It's on Saturday, October 27, at South Mountain Fairgrounds, 1.5 miles west of Arendtsville, PA, on Rt. 234. Hours are 8:00 a.m. to 3:00 p.m.; for more information, see www.rockandmineral.org -- *Editor* 

#### Minerals on Display at Penn State's HUB

Dr. Russ Graham, Director of Penn State's Earth & Mineral Sciences Museum, reports that a new *Color of Minerals* exhibit has been installed in the Hetzel Union Building on Penn State's University Park campus. Dr. Graham says, "I would encourage everyone to visit it before December 9 when it will be taken down. I think the exhibit on Diversity will be particularly appealing since there are a lot of EMS faces in it. The EMS Museum is now in a campaign to raise money for new exhibit cases and we hope to be able to replicate this exhibit in our own museum in the future."

## Friends of Mineralogy - PA Chapter Mines and Minerals - Part II Symposium Nov. 3 - 4

from the symposium announcement

The Pennsylvania Chapter of Friends of Mineralogy will hold its annual Symposium the first weekend in November. The location is the Delaware County Institute of Science in Media, PA, southwest of Philadelphia. Non-members are welcome to attend the Symposium for the same \$20 fee as members. Membership and symposium registration are required for the field trip on Sunday, to a classic Pennsylvania collecting locality "guaranteed to surprise those in attendance."

The Saturday Symposium will include four talks on a variety of North American collecting areas. Donations are requested for two silent auctions and a giveaway table, and there will also be some items for sale. The attendees have broad knowledge of Pennsylvania minerals and collecting, and there's always time to chat and share information. The venue itself is of interest; the 1867 building has its original furnishings and many natural history exhibits, including those of Pennsylvania minerals.

For more information on the Symposium and FOM-PA, please contact Arnold Mogel, pioche@verizon.net, or Doug Rambo, drambo417@comcast.net. -- *Editor* 

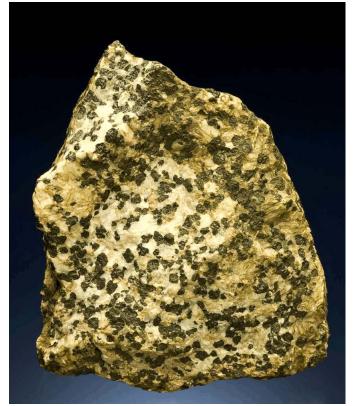
## Gemarama

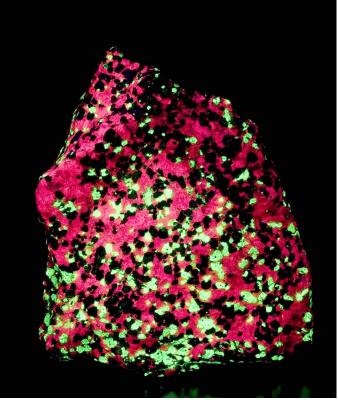
from TLS web site announcements

Gemarama, the annual show of the Tuscarora Lapidary Society, will take place on November 3 and 4, 2007. This is a group of active, practicing lapidaries, and they will have demonstrations of their activities and displays of their work. A variety of dealers in gems and minerals, lapidary materials and supplies, beads, jewelry, and more will be set up.

For a discount ticket and much more detailed information on the show, follow the Gemarama link on their web site, www.lapidary.org -- Editor

October, 2007





**Fluorescent minerals:** One specimen from the Franklin, New Jersey, area is shown in normal daylight at the left and fluorescing under short-wave ultraviolet light at the right. Calcite fluoresces red; willemite fluoresces green; franklinite shows as black because it does not fluoresce. *J. Passaneau photos.* 

## NEWS FROM THE FEDERATIONS

Nittany Mineralogical Society 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.

The EFMLS Newsletter is available through the link on our web site **www.ems.psu.edu/nms/** or remind Dave Glick to bring a printed copy to a meeting for you to see. The October issue starts with a safety article on lifting, an important topic considering the size of rocks that some of our members like to collect! Pennsylvanian Fran Sick says farewell as EFMLS President. Natalie Darling takes over the Bulletin Editor Advisory Committee from Bill Gilbert, who says good-bye. Betsy Oberheim's Juniors activities article covers junior authors of club bulletin articles, and EFMLS contest for juniors' articles.

The AFMS Newsletter is available by the same methods. The October issue starts with new activities and badges for kids in the Future Rockhounds of America program. Dr Robert Carlson has his last message as AFMS President. There are greetings from President-elect Shirley Leeson. The safety article is on sun exposure. More AFMS Rockhounds of the Year are introduced, as are the 2007 inductees to the National Rockhound and Lapidary Hall of Fame. - *Editor* 

#### **ULTRAVIOLATION** "If your rocks don't glow, you're at the wrong show"

An annual show for fluorescent minerals only is coming up in late October in Pennsylvania. The 18th Annual ULTRAVIOLATION, a Show-Swap-Sell-Session featuring fluorescent minerals only, will be held north of Philadelphia on Saturday, October 27, 2007. The location is the First United Methodist Church, 840 Trenton Road, Fairless Hills, PA. Hours are 9:00 a.m. to 4:00 p.m.; admission is a \$2 donation.

This show has a useful method for showing off minerals and rocks that glow in the dark under ultraviolet light. The lights in the room are turned off most of the time, and the dealers have many ultraviolet lights to show off their stock. The room lights are turned on a few times every hour for activities that require them.

This works quite well, and it's impressive to look across the darkened room and see the many glowing colors. Dealers have a very wide variety of sizes, prices, colors, species, and localities of specimens. There are door prizes, and food is available. Table space is available. For information, call 856-663-1383 or e-mail ultraviolation@yahoo.com. -Editor



Mineralogy and earth science for the amateur mineralogist and serious collector

## **Chemistry & Minerals: An Introduction to Mineral Formulas**

by Andrew A. Sicree

#### The formula

The collector often sees, on mineral labels and in mineralogy texts, a chemical formula. Display labels might read "Quartz, SiO<sub>2</sub>, hexagonal, from Arkansas" or "Pyrite, FeS<sub>2</sub>, iso., from Park City, Utah." For those who are moving farther and farther away from high school chemistry class, the meaning of these formulas might be murky. This is a brief overview of mineral formulas for the mineral collector.

#### **Elemental symbols**

First, the elements: chemical formulas (or *formulae* for Latinists) use one- or two-letter symbols for elements. Elements are the basic building blocks of chemistry and mineralogy. Some symbols are clearer in meaning than others. Thus, "Si" for silicon makes sense, as does "O" for oxygen and "S" for sulfur.

Other elemental symbols are a little more obscure. "Cu" for copper looks like a misspelling, but "Co" is used for the element cobalt, so we take the Latin word *cuprum* to derive "Cu". Iron is "Fe," *ferrum*, and lead is "Pb," *plumbum*, from which we also derive the word plumber. This begins to make sense if we recall that water and drain pipes were at one time fashioned from lead, thus a plumber was originally one who worked lead. If you don't know a symbol, most basic chemistry texts and many dictionaries have a list of elements and their symbols.

#### **Chemical formulas**

The formula we use on mineral labels is typically an "empirical" one. This formula gives the elements that make up a mineral and their respective ratios. For instance, quartz is "SiO<sub>2</sub>"

which means that it is made up of one atom of silicon for every two atoms of oxygen. The subscript number tells the relative number of atoms (if there is only one atom, the subscript one is assumed and isn't written down). More examples: hematite is "Fe<sub>2</sub>O<sub>3</sub>" and magnetite is "Fe<sub>3</sub>O<sub>4</sub>". As one can see, both of these minerals are composed only of iron and oxygen, they are both "iron oxides" and are closely related. Hematite has two iron atoms for every three oxygen, and magnetite has three irons for four oxygens.

#### **Importance of structure**

The empirical formula gives only a limited amount of information. Two different minerals may have the same empirical formula. Opal, for instance, is "SiO<sub>2</sub>" the same as quartz. But opal is not quartz! They are both "silicon dioxide," that is, one silicon atom for every two oxygen ("di" meaning "two"). In quartz, the silicon dioxide is arranged in a "hexagonal" (six-sided) structure and in opal it is "amorphous" (without form). The terms hexagonal or amorphous give structural information that is necessary to define the mineral. Likewise, pyrite is  $FeS_2$ , isometric (cubic), and marcasite is FeS<sub>2</sub>, orthorhombic. Pyrite and marcasite are both iron sulfides and they are said to be polymorphs (meaning "many-forms") of iron sulfide because they have the same chemical formulas but different spatial arrangements (i.e. crystal systems).

To have a more rigorous definition of the mineral, you need both the composition and the structure, expressed as the chemical formula and the crystal system. On display labels one usually lists the empirical formula followed by the crystal system. There are six

#### Formulas (cont'd)

crystal systems: isometric (same as cubic), hexagonal, orthorhombic, monoclinic, tetragonal, and triclinic.

Of course, minerals can have more than two types of atoms. Calcite is "CaCO<sub>3</sub>, hexagonal" or "calcium carbonate." It has three oxygen atoms to every one carbon atom and to every one calcium atom. We call it "calcium carbonate" rather than "calcium carbon oxide" because the CO<sub>3</sub> portion of the formula represents a special grouping of carbon and oxygen atoms called an "ion." In this case, the ion is called the "carbonate" ion. Similarly, the mineral strontianite is "SrCO<sub>3</sub>, orthorhombic," or "orthorhombic strontium carbonate" because it also contains the carbonate ion.

Mineral formulas can be quite complicated. Beryl is  $Be_3Al_2Si_6O_{18}$ , hexagonal; muscovite (a member of the mica group) is  $KAl_2(Si_3Al)O_{10}(OH,F)_2$ , monoclinic! Although it pays to know the formulas of the most common minerals, I know of no one who has all the mineral formulas memorized.

You can find a mineral's chemical formula and crystal system in various mineral textbooks as well as in listings such as Fleischer's *Glossary of Mineral Species*.

- A. A. Sicree Dr. Andrew A. Sicree is a professional mineralogist and geochemist residing in Boalsburg, PA. <u>Popular Mineralogy</u> provides technical answers to your general mineral questions. If you have a question you'd like to have answered, please send email to <u>sicree@verizon.net</u> ©2007, Andrew A. Sicree, Ph.D.

#### The Rocking Stone of the Bronx

In the Bronx Zoo in New York, there is a forty-ton glacial boulder of pink granite. This is the famous Rocking Stone. If you apply a force of about seventy pounds, the 80,000-pound stone will rock about one inch. It isn't easy to do: you must push at the right point.

Ref.: *Gathering of Animals, An Unconventional History of the New York Zoological Society*, William Bridges (Harper & Row, New York, 1974) pg. 119.

# Weird Geology

#### "Minerals" found in plants

Generally, definitions of "mineral" state that the mineral is abiological in origin. Thus, kidney stone and gall stones aren't usually considered minerals; some definitions will also exclude pearls found in oysters. These pseudo-minerals are not restricted to the animal kingdom, however. Plant-formed "minerals" include tabasheer and the coconut pearl.

#### The coconut pearl

The term "coconut pearl" or "cocoa-nut pearl" refers, as one might suspect, to a pearl found within a coconut, the seed of the coconut tree (*Cocos nucifera*). In 1841-1850, the naturalist Georg Eberhard Rumphius in a six-volume work entitled *Herbarium Amboinense* described coconut pearls mounted in jeweled gold settings owned by wealthy Malaysian families. These pearls are reportedly calcareous spheres, composed of aragonite, similar to oyster pearls. In recent years, some "coconut pearls" have been offered for sale more than \$50,000!

The natives of Caguyan Sulu, an island in the Sulu Sea, part of the Philippines, once believed that possession of a coconut pearl was the only truly efficacious charm against the attack of the "berberlangs" – a type of ghoul. Unfortunately, the coconut pearl only protected the finder; its magical virtues disappeared when the pearl was given away; furthermore, when the finder dies the pearl loses its luster and appears dead.

Supposedly, the coconut pearl is the "rarest gem of the plant world," but there is some real doubt as to whether or not any such pearl could really occur within a coconut. Obviously, given the substantial sums that a coconut pearl commands, there is a terrific incentive to fakery, possibly by inserting the "pearl" into the coconut through the germination pores on the end.

While some botanical museums display examples of coconut pearls, there is no known biological mechanism by which aragonite could be precipitated by the coconut plant. After all, an oyster pearl is merely a sphere of the exact same material that the oyster uses to make its own shell. The coconut pearl is reputedly so rare that

#### Plant minerals (cont'd)

## Field Collector Safety

Rumphius and other authors who have written about the pearls clearly never found one themselves.

Doubt remains about the true origins of these "pearls." However, it is important to note that some authors report that the coconut pearl is really "a stone like an opal" (ref: R. T. Gould, *Oddities*, Bell, New York, 1944), and is a siliceous concretion similar in composition to a "plant opal" known as "tabasheer." If the true coconut pearl exists and is siliceous, it might be akin to *phytoliths* – silica bodies found with plants such as some grasses. A siliceous coconut pearl would be more believable.

#### Tabasheer

The evidence for the existence of "tabasheer" is much stronger than for coconut pearls. Tabasheer is used in the East Indies as a medicine. Tabasheer and "bambusa" are hydrated silica concretions that come from the joints of the bamboo plant. Analyses of tabasheer reveals that it is mostly hydrated silica with very minor amounts of aluminum, iron, calcium, and magnesium (ref: J. Klinowski, et al., *Philo Mag A* 77:1, Jan., 1998 pp. 201-216). In short, tabasheer really is a "plant opal."

## Mineral Etymologies

Etymology is the study of word origins.

**Meerschaum:** The German words *meer*, or "sea," and *schaum* for "foam" combine to give us *meerschaum*. The term "sea foam" is an allusion to the fact that this soft white clay mineral was often found cast up on beaches and was thought, in ancient times, to be sea foam turned into a mineral. (Meerschaum is easy to carve and was used to make elegant pipes for smoking tobacco.)

**Sepiolite**: The more proper mineral for meerschaum is *sepiolite* a mineral name that comes from the Greek word for the cuttlefish, *sepia*, and from the Greek for stone, *lithos*. Sepiolite is thought to resemble the soft white cuttlefish bone. (Cuttlefish bone is often given to parakeets and parrots to be chewed upon.)

#### Lightning Awareness

You're in a quarry and, looking up, you see dark clouds moving in. Rain is on the way, but the flashes of lightning are more worrisome.

Every year, hikers, golfers, and others caught outdoors during a thunderstorm are struck by lightning. Because they work outdoors, miners and rock collectors are at risk of lightning strike.

Florida leads the nation in lightning deaths with 126 cases documented for the period 1990-2003. Texas comes in as number two with 52 deaths. Colorado, Illinois, Pennsylvania, and Ohio are all in the top ten. Many of the states of the old Confederacy also have high numbers of lightning deaths.

#### How do you estimate lightning distance?

First, look at the direction of the wind. Is it blowing from the direction of the lightning flashes? If so, Thor is headed your way with his thunderbolts.

How far away is the storm? Many lightning strikes occur within 10 miles of a storm system, either before the storm hits or after it passes. The quick method to estimate distance to lightning: (1) see a lightning flash, begin counting seconds ["Thousand-one, thousand-two, etc.]; (2) hear the thunder, stop counting; (3) divide seconds by five to get miles away [thus, 5 seconds = one mile, 10 seconds = two miles, etc.].

#### How do you limit the danger?

The best way to avoid lightning strike is to get out of the way. A building provides more protection than a vehicle. Staying low, off the top of hills or ridges is important. Lone trees might attract lightning and should be avoided. How long should you stay under cover? The Boy Scouts use a 30 minute rule, waiting that long after the lightning passes before resuming activities.

Don't let risks keep you out of the field but do take some simple precautions to limit your chance of being zapped.

# Crystal Matrix Crossword

## Gems

#### ACROSS

- 1 precious stones
- 5 from near Mt. Kilimanjaro
- 11 lotion plant
- 12 started by Baden-Powell
- 13 what all specimens should have
- 14 state of Mississippi Delta
- 16 mountain in Europe
- 17 answered (ab.)
- 18 Tri-State zinc state
- 19 gold has \_\_\_\_
- 21 river state
- 23 soak with water
- 26 gem city in Brazil
- 28 Royal Air Force
- 30 crook's word for diamonds
- 31 Titania's husband
- 33 an unreliable gem dealer
- 35 cops \_\_\_\_ gem thieves
- 37 recording company
- 38 field crystal
- 42 diamond is cubic \_\_\_\_\_
- 45 to consume
- 46 what you put in a ring
- 47 to sleep
- 48 killed for horns
- 50 baloney
- 51 up the  $_{-}$
- 52 element in emeralds
- 53 every rowboat has
- 57 sphere
- 60 Elec. Engineer (ab.)
- 62 platinum or gold \_\_\_\_\_
- 63 flying saucer
- 64 the Mother \_\_\_\_
- 65 kunzites really are \_\_\_\_\_
- 66 gems appeal to big \_\_\_\_

#### DOWN

- 1 opening party at museum
- 2 with style
- 3 gangsters operate \_
- 4 crystal growers start with
- 5 ivory comes from \_\_\_\_\_
- 6 American Gem. Inst.

1	2	3	4		5		6		7			8	9	10
11												12		
13									14	15		16		
17					18			19			20			
				21			22		23			24		
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31					32		33		34					
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38		39	40				41		42		43	44		
		45				46				47				
48					49				50					
		1	51					52			53	54	55	56
57	58	59		60			61		62					
63											64			
65											66			

- 7 emeralds are often
- 8 to be announced
- 9 English for non-English
- 10 sounds like a gem
- 15 language spoken in diamond fields
- 20 guys who fix computers
- 21 gem feldspar
- 22 cheerleaders say this
- 24 needed to catch fish
- 25 metal detector setting for gold
- 26 Rhenium
- 27 spectroscopy used on gems, minerals
- 29 \_\_\_\_ coats go well with diamonds
- 32 to sleep, perchance to dream
- 34 depression organization
- 36 used to carry books
- 39 given to you in Hawaii
- 40 early mineralogist
- 41 color of ruby
- 43 radium
- 44 oil company

- 49 used to remove oils
- 50 light passing through a gemstone \_\_\_\_\_
- 53 to look at a gem
- 54 looking at the Hope Diamond I was \_\_\_\_\_
- 55 to recut
- 56 suites (ab.)
- 58 request for proposals
- 59 ghostly cry
- 61 diamond ore grades in carats per \_\_\_\_\_

#### LAST MONTH'S SOLUTION - Zeolites



## Some Upcoming SHOWS AND MEETINGS

Our web site **http://www.ems.psu.edu/nms/** has links to more complete lists and details on mineral shows and meetings around the country.

**Oct. 20 - 21, 2007:** Gem & Mineral Show & Sale, Mid-Hudson Valley Gem & Mineral Soc., Rhinebeck, NY. Amazing World of Agates. Sat 9-6, Sun. 10-5. http://www.geocities.com/nyrockhounds

**Oct. 27, 2007:** 18<sup>th</sup> Ultraviolation, Show-Swap-Sell-Session featuring fluorescent minerals only, Rock & Mineral Club of Lower Bucks County. First United Methodist Church, 840 Trenton Road, Fairless Hills PA Sat. only, 9:00 a.m. to 4:00 p.m. See page 3.

**Oct. 27, 2007:** South Penn Rock Swap, by the Central Pennsylvania and Franklin County Rock and Mineral Clubs. South Mountain Fairgrounds, 1.5 miles west of Arendtsville, PA, on Rt. 234. Sat. only, 8:00 a.m. to 3:00 p.m. www.rockandmineral.org

**Nov. 3-4, 2007:** "Mines and Minerals - Part II" Symposium by Friends of Mineralogy - PA Chapter. Delaware County Institute of Science, 11 Veterans Square, Media, PA. Membership required for Sunday field trip. See page 2.

**Nov. 3-4, 2007:** 38<sup>th</sup> Gemarama, "Gemstones of the Western USA," Tuscarora Lapidary Society. Founder's Pavilion, The School at Church Farm, Exton, PA. North side of Business Route 30, 1/2 mile west of Frazer- Rt. 30 exit off Route 202. Sat. 10:00 a.m. -6:00 p.m.; Sun. 10:00 a.m. - 5:00 p.m. www.lapidary.org

**Nov. 10, 2007:** 16<sup>th</sup> Annual "Rock Swap" for Mineral, Fossil, Shell, Gem and Lapidary enthusiasts, by Richmond Gem and Mineral Society. Meeting Hall of Ridge Baptist Church, 1515 East Ridge Road, near Regency Square Mall and Douglas S. Freeman High School, Henrico County, Virginia, north of Richmond. Indoors, rain or shine; open to the public, free admission; specimen donation requested from swappers to help defray costs. Sat. only, 9:00 a.m. - 3:00 p.m.

February, 2008: EFMLS Convention, Jackson,Mississippi.H

#### INVITE A FRIEND TO JOIN THE SOCIETY

The Nittany Mineralogical Society prides itself on having the finest line-up of speakers of any earth sciences club in the nation. If you'd like to be part of our Society, dues are \$20 (regular member), \$7 (student rate), \$15 (seniors), \$30 (family of two or more members, names listed). Your dues are used for programs and speakers, refreshments, educational activities, Bulletins, and mailing expenses. Please fill out a membership form, make checks payable to "Nittany Mineralogical Society, Inc." and send them to the

Nittany Mineralogical Society, Inc.

P.O. Box 10664

State College, PA 16805

or bring your dues to the next meeting. *We want to welcome you!* 

## The Society's Schedule

We generally meet on the **third Wednesday** of each month, August through May, in the Earth & Engineering Sciences Building on the west end of Penn State's University Park campus, off White Course Drive. (Except Nov. 14, 2007, the second Wednesday.) Social hour with refreshments starts at 6:30 p.m., and the meeting starts at 7:30 p.m. Everyone is welcome!

**Board Meetings** are now generally held on the **first** Wednesday of the month at 7:00 p.m. Please contact the President to verify time and location for a particular month. Board meeting minutes may be requested from the Secretary.

#### For sale: Equipment & Materials

**For sale:** Very large collection of gemstone material, prefer to sell as one lot; including much jade in various types & colors; mostly rough, plus some slabs; some fine Coober Pedy opal. Also equipment and jewelry making supplies from jewelry studio and production shop. Contact Daniel G. Reinhold in Mill Hall, PA; phone 570 748-3201 after lunch every day, or e-mail: dreinhold@suscom.net

**Mineral Business and personal collection** for sale (hundreds of specimens plus supplies and equipment included). Call Terry at 570-672-2325 Mon. - Sat. 9:00 a.m. - 11:00 p.m. If I'm not there, leave a message. H

## SOCIETY OFFICERS

Dr. Bob Altamura (President) 814-234-5011 (h) e-mail: raltamur@fccj.edu

John Passaneau (Vice-President) 814-863-4297 (o), e-mail: jxp16@psu.edu

David Glick (Secretary) 237-1094 (h) xidg@verizon.net Dr. Duff Gold (Treasurer) 865-7261(o), 238-3377(h) e-mail: gold@ems.psu.edu

OTHER CONTACTS

Field Trips: Ed Echler 814-222-2642 e-mail preferred [new]: eechler@comcast.net Junior Rockhounds: Dr. Andrew Sicree 867-6263 (h) e-mail: sicree@verizon.net

Membership Chair: John Passaneau (see above) Publicity: Daniel Bontempo deb193@psu.edu

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 GlickNew e-mail: xidg@verizon.net209 Spring Lea Dr.phone: (814) 237-1094 (h)State College, PA16801-7226

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