

Nittany Mineralogical Society Bulletin

Nittany Mineralogical Society, Inc.

P.O. Box 10664

State College PA 16805

Editor (see page 4):

David C. Glick

March, 2015

Visit our web site: www.nittanymineral.org

March 18th meeting:

Titanian Minerals Tell Time and Temperature

by

Dr. Maureen Feineman
Department of Geosciences
The Pennsylvania State University

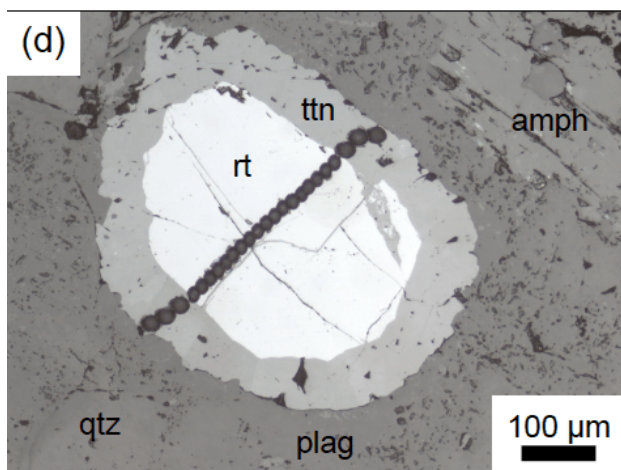
Our March meeting will be held Wednesday the 18th in room 114 (large auditorium) of Earth & Engineering Sciences Building on the west side of the Penn State campus in State College, PA. Maps are available on our web site.

6:30 to 7:30 p.m.: Social hour, refreshments in the lobby

7:30 to 8:00 p.m.: announcements, questions, answers

about 8:00 p.m.: featured program

*The event has free admission, free parking, free refreshments, and is open to all; **parents/guardians must provide supervision of minors.** Bring your friends and share an interesting evening!*



Titanian minerals including rutile (TiO_2) and titanite (CaTiSiO_5) are the primary hosts of the high field strength elements (including Nb, Ta, Zr, and Hf) in metamorphic rocks. The incorporation of these elements into titanian minerals is dependent on temperature and pressure, and the redistribution between rutile and titanite by diffusion provides useful information about the rates of unseen metamorphic processes taking place deep within the Earth. In our research group, we use high spatial resolution analysis of high field strength elements in titanian minerals to determine the rates of processes taking place within subduction zones, where surface rocks are recycled into the Earth's mantle.

Our annual event for kids:

Minerals Junior Education Day - April 11

Registration is now open

Please register by April 6 - \$5 per child

Spread the word!

Our annual Minerals Junior Education Day is fun and rewarding for kids and parents who attend, as well as NMS volunteers who present the event. The event will be held at the same location as last year:

Central Pa. Institute of Science & Technology
540 North Harrison Rd
Pleasant Gap, PA 16823

Please **register in advance** for the approximate time (between 9:30 a.m. and 1:00 p.m.) that you will arrive (see **page 2** for registration instructions).

Students in grades 1-8 and their parents are invited to come and learn about minerals, crystals, gemstones, and fossils. At this event, kids get an empty egg carton when they check in, then go to a series of stations, each concerning a different aspect of mineral properties, rocks or fossils. They learn about the topic from a demonstration or discussion, and receive a properly labeled specimen or educational item related to the topic, so they gather a whole collection in their egg carton. The following stations are planned:

Gold panning	Fossil shells
Bedrock geology of PA	Gemstones
Fluorescence	Meteorites
Fossil bones	Mineral cleavage & structure
Sphere making	

– plus a sales table at kid-friendly prices.

PLEASE tell your friends and relatives and their kids to register now

We are seeking **volunteers** to help to present the stations; contact Dave Glick (see page 4). We also welcome advance donations of identified minerals, tumble-polished material, fossils, books, etc. which can be sold at child-friendly prices. As always, we are very grateful to those who provide crucial support in various ways: co-sponsors Bald Eagle Chapter of the Gold Prospectors Association of America, Junior Museum of Central Pennsylvania, and the Penn State Earth & Mineral Sciences Museum; and donors of materials including Barbara Sincak of Treasures of the Earth, Pen Ambler, Ruth Park, and others. *For updates, directions and maps, see www.nittanymineral.org*

Continued with

REGISTRATION INFORMATION on page 2

Junior Education Day *Continued from p. 1*

Please register in advance by April 6:

BY E-MAIL

Please register by e-mail if possible, as described on the web site www.nittanymineral.org - that's the easy way for us to get your information correctly. We will have a **PayPal** payment option there.

OR BY TELEPHONE

Call (814) 234-4532 (leave a message if no answer) to reserve a starting time slot of your choice at the event (each half-hour from 9:30 a.m. to 1:00 p.m. on April 11, so that we can spread the crowd out through the day). You will be asked for names and addresses of the students so that checking in on-site will go quickly (we will also enter them in our door prize drawing and send them an announcement next year).

THEN send \$5.00 per student (check payable to "Nittany Mineral. Soc." or simply NMS) to:

S. Bingham
145 Goddard Cir.
Penna. Furnace PA 16865-9729

Registration is limited so that we may provide a collection of specimens for each student. Parents come along for free, but don't get the specimens.

For updates, directions and maps, see www.nittanymineral.org

PUBLICITY NOTE: We appreciate your helping us publicize this event - **PLEASE** be sure to include "advance registration required" and our web site, www.nittanymineral.org Thank you! *

OTHER EVENTS FOR STUDENTS

See our February issue for more

Exploration-U State College 2015: March 24, 6-8 p.m.

<http://science.psu.edu/outreach/exploration-u>

EMEX: Saturday, March 28

Penn State Earth & Mineral Sciences Exposition

Sign up: <http://www.ems.psu.edu/emex>

NMS Facebook Group Page

John Dziak <jjd264@psu.edu> has volunteered to administer our Facebook group page ("Nittany Mineralogical Society, Inc.", <https://www.facebook.com/groups/293993550756/> "). It is set up as a discussion group where people can be notified about events and post comments; however, you must be a Facebook user in order to join the group.

John Dziak is a research associate at the Methodology Center, a research institute at Penn State which studies applications of statistics in health and the social sciences. As a hobby, he is interested in fossils and geology.

NMS is grateful to Mike Zelazny for starting and maintaining the group up to the present.

NEWS FROM THE FEDERATIONS

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 present brief summaries here in order to encourage readers to see the entire newsletters.

The **EFMLS Newsletter** is available through the link on our web site www.nittanymineral.org, or remind Dave Glick to bring a printed copy to a meeting for you to see. The March issue has the final invitation for the March 27-29 EFMLS Convention, hosted by the Catawba Valley Gem & Mineral Club in conjunction with their Show at the Hickory Metro Convention Center, Hickory, North Carolina. President Merrill Dickinson discusses people holding multiple positions in the Federation administration - more volunteers are needed to strengthen the organization. Historian Andy Celmer's column enters the 19th century with James Smithson and his bequest to found the Smithsonian Institution. The "Safety Matters" column covers limiting factors - on physical exertion, for example carrying buckets of minerals up out of a quarry, or on vision or staying awake while driving.

The **AFMS Newsletter** is available by the same methods. The March issue begins with news of the AFMS convention (October 23-25 in Austin, TX) and lodging possibilities there. A new prize for the AFMS Endowment Fund Drawing there is illustrated. The Junior Activities column reviews some books approaching the hobby with numbers and interesting lists, such as *Fifty Minerals that Changed the Course of History*.

Please see the web sites for the complete Newsletters. There's a lot there!
- Editor

Geo-Sudoku

by David Glick

This puzzle contains the letters ABEHILMOP, and one row or column spells a group of minerals which can occur in the mantle. Each block of 9 squares, each row, and each column must contain each of the nine letters exactly once. The solution is on page 4.

	H			L		A		
B		A				L	M	I
	I	L						
L					M	P		A
	A		I					
P	B	M	L	H		I		
A					B	O	L	E
H			P		E			M

SHOW TIME IS JUST AROUND THE CORNER

by Larry Huffman,
Catawba Valley Gem & Mineral Club
from the March 2015 EFMLS Newsletter

The March 27 – 29, 2015 EFMLS Convention and Show will be here in a flash! Have you made your motel reservation yet? Look for the info on the Hampton Inn in this edition. The Catawba Valley Gem and Mineral Club are ready to host our convention and the show. If you are planning to exhibit and need a display case, please send your exhibit info in soon so a case can be reserved for you.

We are excited to have two speakers at this year's convention.

Shelly Sargent, the curator of "Somewhere in the Rainbow", a collection of North American gemstones will be our guest speaker at the Banquet on Saturday night. The collection is a privately funded nonprofit. Their goal is to bring examples of some of the best jewelry and gemstones to the public. Their philosophy is that many museums keep things locked away and out of public view. They have set out to acquire the finest gemstones and then have contemporary up and coming designers create designs around the pieces. Craig Lynch will also be attending the show; he is the gemologist and appraiser for the collection. I'm sure you will find both the exhibit and Shelly's talk to be a show stopper! [Editor's Note: We met Shelly while at the AGTA show in Tucson this year and can tell you that a) she's a delightful person, b) the collection that she had on display was just awesome, and c) she tells us that she will be unveiling an incredible new specimen with a North Carolina connection at the show!]

At 1 pm on Saturday in the show hall education room, Eric Fritz will give a short introduction to Gemology. Eric is a former member of CVGMC and the current Manager of North America for Gem-a, the Gemological Association of Great Britain. Gem-A is the world's oldest and most respected leader in Graduate Gemology training in the world. Gem-A and Jewelry Television (JTV) have partnered to offer an introductory course, Gem Basics. Gem-A has made a commitment in North America to bring education to the gem and mineral community on any level of interest. JTV will be on hand at the show to help showcase the "Somewhere in the Rainbow" exhibit. Join us, won't you?

The EFMLS Auction will be held in the same room at 1:30. There will be lots of great items to bid on. If you have not sent your donation to Cheryl Neary at 42 Jefferson Ave; Patchogue, NY 11772 please do so soon or you can bring your items to the convention and turn them over to Cheryl as you register Thursday night or Friday. Matt Charsky will be putting on a show as auctioneer for this fun event so don't miss out.

ATTENDING THE MARCH MEETING?

Donations of labeled **door prize specimens** are invited.
Your donated snacks and drinks will be welcomed.
Bring a friend!

Classifieds

Ads may be submitted to the Editor (see p. 4)

FOR SALE: This sturdy, three-legged cast aluminum lapidary unit is made by Gemlap Equipment, model 5-A. Its tub is 4 inches deep, and will hold any grinding wheel or platen up to 2-inches thick and 10 inches in diameter. Its center ball bearing mounted spindle is 0.5 inches in diameter, with a 0.5-20 UNF fine thread (20 threads per inch.). It is driven from below by any conventional pulley system. Old but in excellent condition. \$25; proceeds go to NMS. Photos in Feb. Bulletin. Contact Jim Garthe, jwg10@psu.edu, (814) 667-2409.

FOR SALE: Long-time Pennsylvania collector John 'Pen' Ambler in Hollidaysburg has books, specimens and more for sale. Pen reports: "I have some 10 – 15 cartons of books on minerals and mineral related subjects. My cataloged collection consist of upwards of 6,000 specimens some of which were the Ed Carper collection. The specimens are cabinet, small cabinet, hand-sized, miniature, thumbnail and micro minerals. Many of the minerals are PA and eastern U.S.; however, it is a varied collection. There are lapidary materials (slabs and some bulk); limited fossils; tumbled stones including PA amethyst; UV materials and equipment; supplies (boxes, etc.)." Please contact Pen by email: bridger@atlanticbb.net

FOR SALE: 2 Homemade Lapidary saws for sale - 14" and 18". Both come with working motors, arbor, belt, pulley, rock clamp/carriage, and a blade. Both are mucked-out and ready to move. Both could use a little TLC. For more info contact Mike Zelazny at fabricatefilm@yahoo.com

FOR SALE: Meiji RZ-B Trinocular Microscope & Accessories, Mineral Specimens, Crystal Models. Contact Frank & Gail Beall, 724-789-7290. See page 7 of the February NMS Bulletin and a much more complete listing at www.nittanymineral.org/beall.pdf

Some Upcoming Shows and Meetings

Our web site <http://www.nittanymineral.org> has links to more complete lists and details on mineral shows and meetings around the country.

See www.mineralevents.com for more.

March 21-22, 2015: Annual Jewelry, Gemstones, Minerals & Fossils Show, by Franklin County Rock & Mineral Club. Hamilton Heights Elementary School, 1589 Johnson Rd., Chambersburg PA

March 27-29, 2015: EFMLS Convention and Show, Hickory, North Carolina. Field trips. See page 3. <http://www.amfed.org/efmls/conventionp.htm>

March 28-29, 2015: Philadelphia Mineral Treasures and Fossil Fair, by Phila. Mineral. Soc. & Delaware Valley Paleo. Soc. Lulu Temple, 5140 Butler Pike, Plymouth Meeting, PA

March 28-29, 2015: Rock & Mineral Show by Che-Hanna Rock & Mineral Club. Athens Township Vol. Fire Hall, 211 Herrick Ave., Athens PA. <http://www.chehannarocks.com/show.html>

April 18-19, 2015: North Museum Rock, Mineral & Fossil Show, by North Museum of Natural History & Science. Farm & Home Center, 1383 Arcadia Rd. Lancaster PA

May 2-3, 2015: Treasures of the Earth 2015, Annual Show & Sale by The Mineralogical Society of Northeastern Pennsylvania. Oblates of St. Joseph, 1880 Hwy 315, Pittston PA 18640. Sat 10-5, Sun 10-4.

May 9, 2015: South Penn Spring Rock Swap— South Mountain Fairgrounds-1.5 miles West of Arendtsville, PA on Route 234. Sat. only, 8:00 a.m.- 3:00 p.m.

May 16-17, 2015: World of Gems and Minerals Show, by Berks Mineralogical Soc. Leesport Farmer's Market, Route 61, Leesport, PA.

June 6, 2015: Spring Mineralfest, by Penna. Earth Sciences Ass'n. Macungie Memorial Park, Poplar St., Macungie PA. Sat. only, 8:30-3:00.

Geo-Sudoku Solution

O	H	E	M	L	I	A	P	B
B	P	A	E	O	H	L	M	I
M	I	L	A	B	P	E	O	H
L	O	I	B	E	M	P	H	A
E	A	H	I	P	O	M	B	L
P	B	M	L	H	A	I	E	O
I	E	B	O	M	L	H	A	P
A	M	P	H	I	B	O	L	E
H	L	O	P	A	E	B	I	M

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 \$20 (regular member), \$7 (student rate), \$15 (seniors), \$30 (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!

SOCIETY OFFICERS

David Glick (President) 814-237-1094 (h)

e-mail: xidg@verizon.net

Dr. Bob Altamura (Vice-President) 814-234-5011 (h)

e-mail: raltamura@comcast.net

Ellen Bingham (Secretary)

e-mail: emb22@psu.edu

Stuart Bingham (Treasurer)

E-mail: sebing145@comcast.net

OTHER CONTACTS

Field Trips: Ed Echler 814-222-2642

e-mail preferred: eechler@comcast.net

Junior Rockhounds: Dr. Andrew Sicree

814-867-6263 (h) e-mail: sicree@verizon.net

Membership Chair: David Glick (see above)

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

e-mail: gold@ems.psu.edu

Door Prizes: *volunteer needed!*

Refreshments: *volunteer needed!*

Facebook: John Dziak, e-mail: jjd264@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 Glick E-mail: xidg@verizon.net

209 Spring Lea Dr. phone: (814) 237-1094 (h)

State College, PA 16801-7226

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 captions and name of photographer or artist.

Visit us at www.nittanymineral.org