

# Mineralogical Society of the District of Columbia



## *MINERAL MINUTES*

*The Mineral Minutes is the bulletin of The Mineralogical Society of the District of Columbia, Inc.*

*The purpose of this Society is to promote interest in mineralogy, geology, and related earth sciences and to encourage mineral collecting. An annual scholarship is awarded to a deserving student in the related field.*

*The Mineralogical Society of the District of Columbia is one of the founding Societies of the Eastern Federation of Mineralogical and Lapidary Societies.*

**Vol. 72, No. 4**

**Founded 1942**

**April 2013**



### **Please Join Us on April 3, 2013 for Robert Simonoff's Presentation on Mineral Photography Techniques**

Bob Simonoff will present some mineral photography tips and techniques. His presentation will include the discussion of photomicrography (photography of microminerals), macro photography, and photography of museum specimens. He will show some things that can go wrong and how to resolve them. There will be lots of mineral photos, both good and bad!

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## **THE PREZ SAYS...**

*By Stephen Johnson*



Every month I'm reminded why I picked a science major...because I don't enjoy writing! But, Sheryl is like that guardian angel who sits on my shoulder and gently reminds me about what needs to be done...that I need to put pen to paper and write something.

So, we've figured out what our snow plan is. Hopefully, we won't have to use it again anytime soon. I'm looking forward to our visit to William & Mary next weekend on several level--first, because I spent several years studying there, and, second because the Geology Department finally has a mineral collection really worthy of display and study. For those planning on attending, please make sure you send me an email. I will be sending out detailed information this week plus, I will have recommendations on where to eat and what to see if you're going to take in some of the sights after seeing the mineral collection.

The scanning of old newsletters continues to go well. I only have two more binders to complete. Then, I am probably going to have to head to USGS to fill in any remaining holes. I hope to start getting them posted on the website after the next meeting. It's going to be a busy month with the Montgomery County Show, our upcoming William & Mary field trip, caving with Tom Tucker, a show up in New Jersey next month, and finally, the Super Dig and Franklin Show at the end of the month. Plus, Rochester is coming up! I probably need to start putting that on my calendar!

## **Each One Teach One Award for Cynthia Payne**

*By Tom Tucker*

Cynthia Payne was awarded the third-place award in the Eastern Federation annual competition of Each-One, Teach-One. The following is the nominating petition that we submitted in her behalf. Cynthia has been an active member of our Club for decades, and has served in many capacities, including President. Congratulations Cynthia!

The Mineralogical Society of the District of Columbia would like to present Cynthia Payne as our nominee for Each One Teach One, 2012. Cynthia is in her tenth decade of an active life, and her sixth decade as a contributing member of our Club. Over the years Cynthia has amassed the usual overabundance of rocks and minerals that many of us have.

This past year, Cynthia has been enthusiastically examining her extensive collection, many found over the years of field collecting and sharing, finding specimens that would be appropriate for study material in grade and middle school science classes. With the assistance of other Club and Federation members, the labeled specimens were arranged in kits for presentation to various school children and classes, to be used in support of their Earth Science studies. When oral presentations are made by club members to school classes, each student in the class is given a carton of minerals, from Cynthia's collection. The children are happy, the teachers are happy and just maybe some of them will develop further interest and knowledge in rocks and minerals because someone bothered enough to give them a "box of rocks". Though not an "active" teaching activity, Cynthia's enthusiastic participation in supporting the valuable technical education of our youngsters should contribute significantly to their being knowledgeable future citizens with a better understanding and appreciation of our Earth Sciences, and the world around them.

## **CHECK US OUT ON FACE BOOK!**

Visit "Mineralogical Society of the District of Columbia" to share your comments, links, and photos.

(Administrators are: Steve Johnson, Betty Thompson, Bob Simonoff and Sheryl Sims.)



**The Museum of Mineralogy, University of Rome "La Sapienza"**  
(Photo credits: [http://euromin.w3sites.net/Nouveau\\_site/musees/rome/MUSROME.htm](http://euromin.w3sites.net/Nouveau_site/musees/rome/MUSROME.htm))

## **Popes' Mineral and Chemical Contributions Down Through The Ages**

*By Andy Thompson*

With the extensive media coverage during the March 2013 papal election in Rome, some mineral collectors may have imagined whether any popes have been mineralogists? After all, the gospels preach that the Church was founded upon Peter (Petrus), meaning rock, and the gates of hell would not prevail against it. So with such a promising beginning, it seems fair to ask: Were there any geologically oriented popes?

Historians would be a little hard pressed to find many examples of geologists or mineral collectors among the ranks of popes. To the best of my knowledge, for example, the interests of recent popes have not included geology as such. Rather, they all have been trained as theologians and had a desire to serve others. None have been trained geologists or collectors. The recently elected Pope Francis, however, did earn a Master Degree in chemistry from the University of Buenos Aires, Argentina, before changing careers and taking advanced degrees in theology, including a doctorate at the University of Freiburg in Germany.

However, Frances' strong early interest in science is somewhat typical of many of the popes since the 17<sup>th</sup> century. The pope who excommunicated Galileo was actually a big supporter of his astronomical theories until Galileo publically ridiculed him as a mule for being so slow to accept as a reality, the heliocentric view of our solar system. Copernicus, a priest, proposed that theory a century earlier and did so without being condemned.

Of course, we are leaving aside for the moment the question of collecting jewels, gemstones and precious metals which several of the renaissance popes amassed. Later, popes donated their acquisitions to the Vatican treasury where they were kept under lock and key in nearby Castel Sant' Angelo. That collection had more to do with the Vatican's economic security than science. But, all it would take to find evidence of several papal mineralogists would be a visit to Rome's Sapienza University. There, visitors will discover a geology program of studies, a mineral lab, geology museum and an extraordinary collection of 388 cabs of various minerals, all personally generated by several science-friendly popes (described in an earlier edition of Mineral Minutes).

The Sapienza University was founded and funded by Pope Boniface VIII starting in 1304. This university was typical of its time, more interested in philosophy and the arts. Science had not yet evolved from its roots in philosophy. Earth sciences in the West were relatively non-existent and had not progressed much beyond Aristotle. When it did begin to break free in the early 17<sup>th</sup> century, science was known as natural philosophy. By the beginning of the 19<sup>th</sup> century, Pope Pius VII mandated the Sapienza create two new chairs, Natural History and Mineralogy. He also initiated a scientific laboratory and started the collection of minerals in what later became the magnificent Museum of Minerals. Today, when you first enter the Museum gallery, you encounter a life-size bust of Pope Pius VII, which honors his initial support of the University's study of earth sciences.

Within two decades, another pro-science Pope, Leo XII, took office and immediately lifted the ban on Galileo's previously forbidden books. He also mandated and funded an expansion of the mineral museum's collection.

In 1824, Pope Leo XII bought and donated the collection of 388 octagonal shaped cabochon minerals which became known internationally as the Dactyliothea papal ring collection. It made its first international appearance at the Tucson mineral show a few years ago.

Then, in 1851, Pope Pius IX bought over 12,000 mineral specimens and donated them to the Sapiientia Museum. They had been collected by a mineral enthusiast, Lavinio de' Medici Spada, a non-cleric who represented Pius IX and Pope Gregory XVI as a papal legate to other nations, and, after whom the minerals parsite and spadaite were named.

So despite that fact that history has recorded several serious conflicts between faith and science, the last four hundred years also witness papal encouragement of scientific research. The still functioning astronomical observatory found on the Vatican's grounds points to a papal desire to harmonize theology and science, heaven and earth. The earth sciences have received some support, as noted above. But we'll have to wait and see if Pope Francis' early training as a chemical technician shows up in the Church's interface with the scientific community.



## THE DACTYLIOTHECA

The Dactyliothea is a collection of 388 precious and ornamental stones often mounted on plates of agate or other semiprecious materials, mostly cut in octagonal shape, 28x28x2 to 40x20x3 mm, or as cabochons, about 20x15x4 mm.

**Section 1 - Comprises 95 samples.**

Gems of different cut and shape (32), composite insects (9), and plates showing a mixed cut with an octagonal shape (54), placed on four plateaus with 32, 19, 19 and 25 gems respectively.



**Section 2 - Comprises 141 samples and a collet.**

Plates of ornamental stones showing a mixed cut with an octagonal shape, placed on four plateaus with 36, 35, 35 and 35 stones respectively.

**Section 3 - Comprises 150 samples and a collet.**

Cabochons cut with an oval shape, ornamental stones, placed on four plateaus with 38, 37, 38 and 37 stones respectively.

Plate sizes are almost the same, about max. 40x20x3 mm, and min. 28x18x2 mm. The cabochons are also cut to similar sizes, about 20x 15x4 mm.



## SHIPWRECK YIELDS MINERALOGICAL MEDICINE

By *Erich Grundel*

Several decades ago I purchased an unusual book<sup>1</sup>. I bought it because it deals with subjects that are of interest to me. The use of minerals for treating illness was something that was more common in the past than it is today. Recently a paper<sup>2</sup> described the contents of a 2000 year old medicine that contained significant amounts of minerals

Most of our knowledge of the composition of drugs used in ancient times comes from the writings of those times. During the height of the Greek and Roman Civilizations we can learn from the writings of Theophrastus, Pliny the Elder and Dioscorides, what some of the ingredients were. Archaeological recovery of intact drugs from this time period is very rare.

The Pozzoni shipwreck is located on the seabed of the Baratti Gulf near Piombino, Italy. Among the items recovered by archaeologists were tin vials used to store tablets that were used as medications. Other medical type items recovered lead investigators to theorize that one of the passengers on the ill-fated ship was a doctor.

Using scanning electron microscopy with energy dispersive X-ray spectroscopy (SEM-XRD) along with Fourier transform infrared spectroscopy (FTIR) scientists identified hydrozincite,  $Zn_5(CO_3)_2(OH)_6$  and smithsonite,  $ZnCO_3$ , the two dominant ingredients, as well as hematite,  $Fe_2O_3$  in the fragments of the one tablet

<sup>1</sup> Stephenson, John, *Medical Zoology and Mineralogy*, 1838

<sup>2</sup> Giachi, Gianna et al., Ingredients of a 2,000-year old medicine revealed by chemical, mineralogical and botanical investigations, *Proceedings of the National Academy of Sciences*, v. 110(4), pp. 11930-1196, January 33, 2013. Also at: [www.pnas.org/cgi/doi/10.1073/pnas.1216776110](http://www.pnas.org/cgi/doi/10.1073/pnas.1216776110) (accessible through subscription only).

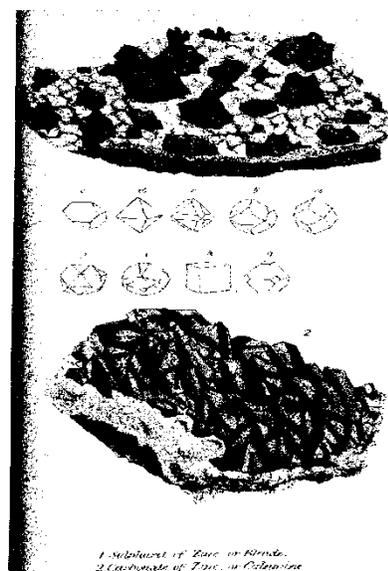
that was analyzed. In addition, plant material was also identified in the tablet.

The use of zinc (Zn) compounds in treating maladies is still an acceptable medical practice today. Over-the-counter ointments for treating skin conditions or preventing them, for example sunburn, are readily available. The tablets were of course intended for internal use. Today, heavy metals like zinc in the quantities present in the tablets are not used because of toxicity concerns. Low dosage amounts such as those in vitamins are acceptable since zinc is an essential trace element for humans.

The presence of an iron (Fe) mineral in the tablet was not explained in the paper. Iron of course is highly essential to humans because it is needed for hemoglobin which is the molecule that transports oxygen throughout our bodies. Iron fortification of food is very common as is the presence of iron in vitamins.

The combination of zinc and iron minerals in one tablet suggests that the ancient physicians may have thought there is a synergistic benefit to be derived from the combination. Whatever the reason for the minerals' presence, this discovery shows that mineralogical knowledge was used for medical benefit 2,000 years ago.

Illustrations of some of the zinc minerals used for medical purposes. From *Medical Zoology and Mineralogy* by John Stephenson MD., 1838. Blende is the mineral sphalerite. Calamine is the mineral smithsonite.



## DID YOU KNOW?

### **SCRIBE a/k/a Special Congress Representing Involved Bulletin Editors**

#### **EXISTS TO:**

1. Improve communications and public relations between gem, mineral, fossil societies, their federations, and other related organizations through involved bulletin editors and authors.
2. To advise and assist new editors with old ideas and old editors with new ideas while giving all editors a share in all ideas for publishing better bulletins.

**(FROM: SCRIBE - Special Congress  
Representing Involved Bulletin Editors -  
Volume 37 No 1 Jan.-Mar. 2013)**

### **2012 Scribe Article Contest**

*Diane Dare & Trudy Martin*

Here are the results of the 2012 contest. Prizes are awarded to the top three. All participants receive our sincere thanks and a Certificate of Participation.

Will you be a prize recipient next year? Give it a try – just remember it should be Scribe, Editor, Bulletin, Hints and Tips related.

#### **1. Copyright Issues by Randy Ernst (Jul-Sep)**

Good advice! This is something we editors may have unwittingly been guilty of in years past. Crediting a source and obtaining permission to reprint is SO important in this “sue-happy” age. I was never refused permission from a magazine, newspaper or company: most just asked for a credit line and a copy of the newsletter.

#### **2. Editor Tip: Proofreading by Mark Nelson (Jan-Mar)**

Good tips and a good reminder, especially about people’s names. (I was reminded of this when a recent bulletin carried the death notice of a long-time very active member and spelled her name wrong.)

#### **3. How Do I Win the BEAC Bulletin Editor’s Competition or the AFMS Web Site Competition? by Dan Imel (Oct-Dec)**

An excellent explanation of how judges look at bulletins and web sites. It is so true- the items on the score sheet are items your club members should get, and judges really do go over entries multiple times to find them

#### **4. Who is Your Backup Editor? by Kreigh Tomaszewski (Jul-Sep)**

A serious question that all clubs should consider (and not just editor but also other positions such as program, field trips, etc. should have a backup, assistant or cochairman.) Often the editor serves in that position for many years- I know of several people who have been “temporary editor” for ten years or more! While addresses to the Club, this subject IS important to editors and website creators.

#### **5. USPS Non-profit Bulk Mailing Changes by Betty Cain (Oct-Dec)**

Timely and appropriate. Many bulletins and newsletters still go out as hardcopies by mail (to people like me!) and it is important that the USOS regulations be followed. This is directed to the person handling the distribution, who frequently is also the editor.

#### **6. Subscribing to S.C.R.I.B.E. by Sheryl E Sims (Apr-Jun)**

How nice to have such an enthusiastic new editor! Sheryl is a reminder to us of the reason S.C.R.I.B.E. exists – to help and encourage our new editors. This is also a good reminder of what new editors turn to S.C.R.I.B.E. for. (Wow – she has already mastered the art of catchy alliterative article titles!)

#### **7. Freeware PDF Tools by \_\_\_\_ (Jul-Sep)**

(This article lost points because no author is identified. However, it is usually assumed that articles not credited are by the editor ....) The credit line at the end suggests the list was copied, with some comments added by the author. Note that the same “... To protect your PDF files ...” appears twice.

## 8. A Rockhound's Photography by Dick Stata (Jan-Mar)

A nice, friendly, personal article, and a reminder about the value of pictures as club history as well as personal memories. Do take note of the difference between your and you're.

## 9. The Editors Breakfast by Janie Duncan (Jul-Sep)

A title should tell the reader what the article is about: Very little of this is about the Editors Breakfast. (How many were there? Was there a speaker? Who handed out awards? Etc.) It is really about how this editor puts her bulletin

### Linked-In:

- [http://www.cnn.com/2013/01/18/business/australia-gold-nugget-discovery/index.html?hpt=hp\\_c3](http://www.cnn.com/2013/01/18/business/australia-gold-nugget-discovery/index.html?hpt=hp_c3)
- <http://www.csmonitor.com/World/Global-News/2012/0917/Russia-reveals-shiny-state-secret-It-s-awash-in-diamonds>  
<http://www.popularmechanics.com/technology/engineering/news/one-american-mine-versus-chinas-rare-earths-dominance-14977835?click=pp>
- JMU Geology website to:  
<http://csm.jmu.edu/minerals>
- <http://brucemuseum.org/site/education/detail/exhibition-programs-for-chinas-aurs-dinosaur-discoveries-from-china>
- Researchers grow diamonds for industrial use  
[http://www.cnn.com/TECH/9610/08/t\\_t/diamonds/index.html](http://www.cnn.com/TECH/9610/08/t_t/diamonds/index.html)
- Geological Timescale Gets the First New Period in 120 Years  
<http://news.bbc.co.uk/2/hi/science/nature/3721481.stm>

together and makes use of exchanges. Some good tips.

### PARTICIPATION CERTIFICATES:

#### Winter Field Tips by Kreigh Tomaszewski (Jan-Mar)

#### Participation in a Mineral Club is Not a Spectator Sport by Sheryl E Sims (Jul-Sep)

#### Where Have We Been? Do We Know Where We're Going? By Linda Jaeger (Jul-Sep)

**SPECIAL THANKS** To Barbara Florio Graham for contributing to every issue of the newsletter! It is very generous of her to assist our group this way.

- The Smithsonian has an Associates program and for the price of admission, you can attend various lectures or outings. For additional information, call Smithsonian Associates at: (202) 633-3030.

## FEDERATION NEWS

### AFMS Officers for 2012-13

President - Don Monroe (SFMS) President-elect - Richard Jaeger (RMFMS)  
1st Regional Vice President – Marion Roberts (CFMS)  
2nd Regional Vice President – Matt Charsky (EFMLS)  
3rd Regional Vice President – Ann James (SCFMS)  
4th Regional Vice President – Sandy Fuller (MWF)  
5th Regional Vice President – Doug True (NFMS)  
Treasurer – Pat LaRue (2 year term)  
The position of Secretary was not up for election this year. Anne Cook will complete the 2nd year of her 2 year term

### EFMLS Officers for 2012 - 2013

President - Cheryl Neary, [ciervo.neary@gmail.com](mailto:ciervo.neary@gmail.com)  
1<sup>st</sup> VP - Hazel Remaley, [northridge5@verizon.net](mailto:northridge5@verizon.net)  
2<sup>nd</sup> VP - Merrill Dickinson, [medsearchnorth@comcast.net](mailto:medsearchnorth@comcast.net)  
Secretary, Gerry Cox, [gerryannec@verizon.net](mailto:gerryannec@verizon.net)  
Treasurer, Lou Budell, [labudell@windstream.net](mailto:labudell@windstream.net)  
Asst. Treasurer - Michael Patterson, [Michael.Patterson@pgparks.com](mailto:Michael.Patterson@pgparks.com)  
Editor, Carolyn Weinberger, PO Box 302, [cscrystals2@gmail.com](mailto:cscrystals2@gmail.com)

**Plan Ahead! 2013 AFMS Convention & Show**, Sept. 18-22, 2013, Jacksonville, FL  
Sept. 18 - Uniform Rules; Sept. 19 - AFMS Annual Meeting & Scholarship Foundation Meeting; Sept. 20-22 – Show, Sept. 21 - Awards Banquet  
Sept. 22 - Breakfast with Editors & Webmasters

## Workshop Opportunities - Eastern Federation

The EFMLS fall workshop will also be held at the Wildacres Retreat just before the AFMS Convention in Jacksonville. Each workshop features instruction in a variety of classes plus the added bonus of having six excellent talks by a "Speaker-in-Residence". For the September 2- 9 session, the featured speakers will be Quintin and Willow Wight, well known mineral and gem experts. Cost for the one week session is \$380 per person (room, board and instruction). Classes being offered at the fall session include Beading, Cabochon Cutting, Cold Connections, Anodizing Reactive Metals, Faceting, Intarsia, Scrimshaw, Silversmithing, and Stained Glass. To learn more about the Wildacres Retreat, the classes and speakers, visit the EFMLS web site <[www.amfed.org/efmls](http://www.amfed.org/efmls)> and click on the Wildacres tab. You'll find class descriptions and a registration form as well.

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## Thin Section Field Trip

**Saturday, April 6<sup>th</sup>, 1:30 pm until . . .**

**Northern Virginia Community College Geology Department, Annandale Campus, CS Building, Room 217**

NOVA will open its geology lab to the MSDC, to let you all use our polarizing microscopes to view thin sections. This event is specifically aimed at those who have never seen a thin section before, as well as experts.

- Itching to look at thin sections again? Come browse our collection of over 1000 thin sections.
- Never seen a thin section? We have a tutorial to get you started, a set of "Must See" thin sections, and live support by people who can help you get started.
- Want to know how thin sections are made? We'll have a demo/exhibit set up showing that.
- Like to hang out with nice people? It's the MSDC. 'Nuff said.

p.s. I just discovered a set of a dozen thin sections of micas. Spectacular!

The Northern Virginia Community College Annandale Campus is located a mile or so outside the beltway on Little River Turnpike

**Address:           8333 Little River Turnpike  
                          Annandale, VA 22003-3796**

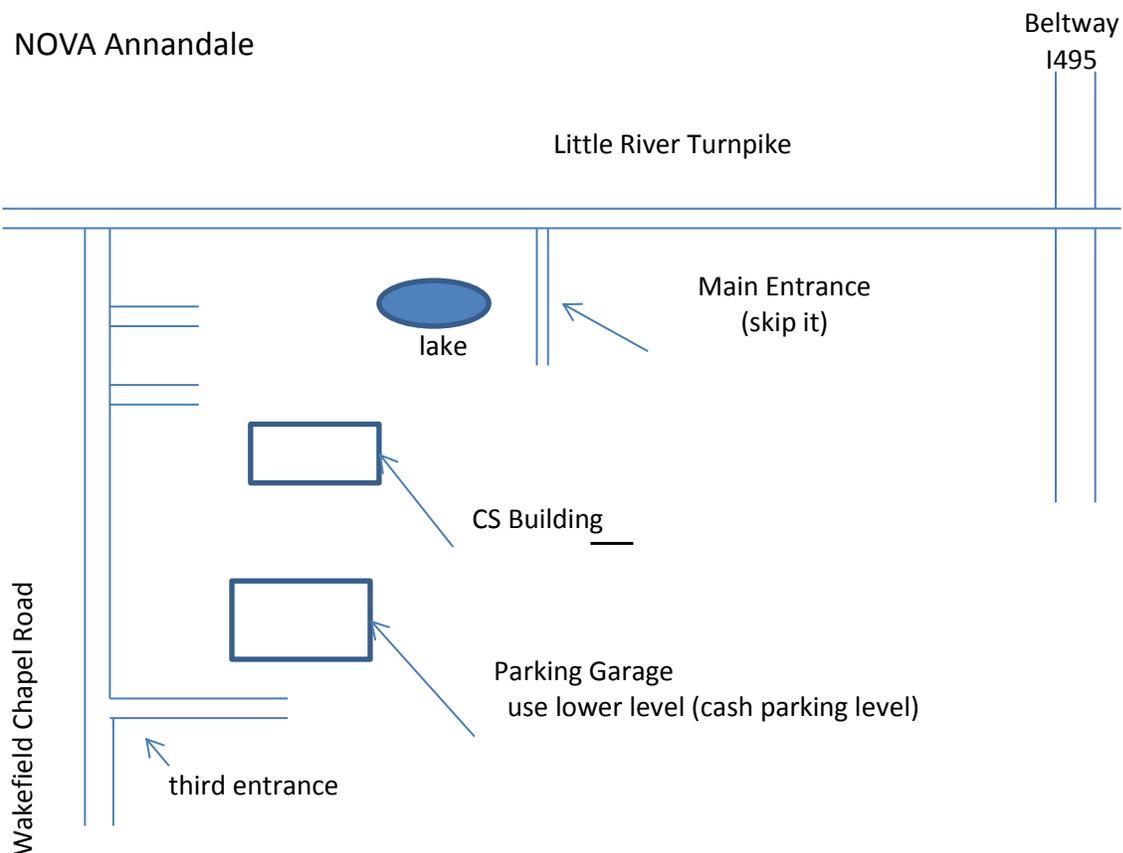
**See <http://www.nvcc.edu/about-nova/maps-directions/annandale/index.html> for maps.**

However, you do not want to drive onto campus thru this main entrance, the entrance on Little River Turnpike. Instead, drive west past it. Go left at the next light (Wakefield Chapel Road), left at the third entrance (at the bottom of the hill), and left into the bottom level of the parking garage. Don't worry about the signs about "Cash Parking". We have vouchers to pay for the parking.

In the garage, drive up as far as possible, park, and walk out to the north. North is back toward Little River Turnpike; it is uphill.

The CS building is the only building north of the parking garage. As you see it, it looks to be a one story building, but that's because you are entering on the second level. If you stop someone to ask, ask for the CS Building or the Science Building.

We will be set up in CS 217, which is roughly the northeast corner. Follow the sounds of the happy mineralogists. Problems? Call Dave Nanney at 703-624-3996 or John Weidner at 571-241-6459. We will have vouchers to pay for the parking for this event. Be sure to pick up one up!



**JOIN US!**

## Mineral of the Month - via Midat.org and Wikipedia - Tourmaline group

*(From: The Stamford Mineralogical Society Newsletter of March 2013 pp. 2-4, by Ed Mattson, Editor)*

Tourmaline is a boron silicate mineral with aluminium, iron, magnesium, sodium, lithium, or potassium that create the varieties. Gem grade Tourmaline is a semi-precious stone and occurs in many colors. The name originates from the Sinhalese word "Thuramali" or "Thoramalli", which at one time, was applied to different gemstones found in Sri Lanka.

The Dutch East India Company imported these gems into Europe and due to the lack of mineralogical knowledge Schorl and Tourmaline were thought of as different minerals. Identifying minerals prior to scientific technology was based on the easily visible properties. Alternatively, if it walks a duck, quacks like a duck, flies like a duck, looks like a duck, then it is a duck.

Many minerals form what are called series. A mineral can have two "end members" each with a definite chemical formula, but individual element(s) can substitute for another gradually between the end members. There are a few minerals that have three end members.

This is one of the reasons for color zoning in Tourmaline, such as the "watermelon" tourmalines - a pink core surrounded by pale green or the famous "blue caps" - a red or pink body with the top or termination being an intense blue color. The trace chemical color composition was changing as the crystal formed.

Tourmalines occur in igneous and metamorphic rocks and found in granites and granite pegmatities. Schist and marbles are other major host rocks. Being hard, eroded grains have been found in sandstones and conglomerates.

Current sources are Sri Lanka, Brazil, Tanzania, Nigeria, Kenya, Madagascar, Mozambique, Namibia, Afghanistan, Pakistan, Sri Lanka, and Malawi. In the United States, sites in Maine and California have produced most of the American supply.

There are now 14 minerals in the group. These are the end member formulas.

Buergerite	$\text{NaFe}^{3+}_3\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3\text{O}_3\text{F}$	Chromdravite	$\text{NaMg}_3\text{Cr}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_4$
Dravite	$\text{NaMg}_3\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_4$	Elbaite	$\text{Na}(\text{Li}_{1.5}\text{Al}_{1.5})\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_4$
Feruvite	$\text{CaFe}^{2+}_3(\text{MgAl}_5)\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_4$	Foitite	$(\text{Fe}^{2+}_2\text{Al})\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_4$
Liddicoatite	$\text{Ca}(\text{Li}_2\text{Al})\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_3\text{F}$	Magnesiofoitite	$(\text{Mg}_2\text{Al})\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_4$
Fluor-liddicoatite	$\text{Ca}(\text{Li}_2\text{Al})\text{Al}_6(\text{BO}_3)_3\text{Si}_6\text{O}_{18}(\text{OH})_3\text{F}$	Rossmannite	$(\text{LiAl}_2)\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_4$
Olenite	$\text{NaAl}_3\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3\text{O}_3\text{OH}$	Vanadiumdravite	$\text{NaMg}_3\text{V}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_4$
Schorl	$\text{CaMg}_3(\text{MgAl}_5)\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_3\text{F}$		
Uvite	$\text{CaMg}_3(\text{MgAl}_5)\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_3\text{F}$		
Luinaite-(OH)	$\text{Na}(\text{Fe}^{2+}_3)\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3(\text{OH})$ - is a monoclinic based dimorph of Schorl.		

The basic properties are: Color - Most commonly black, but can range from brown, blue, violet, green, pink, or in a dual-colored pink and green or pink and blue. Crystal system - trigonal. Crystal form - Parallel and elongated acicular prisms, sometimes radiating. Massive. Scattered grains (in granite). Cleavage - indistinct. Fracture - uneven, small conchoidal and brittle. Hardness - 7 to 7.5. Luster - virtuous, resinous. Streak - white. Specific gravity - 3.06. Density - 2.82-3.32.



Schorl, Idaho, U. S. A.



Buergerite, Mexico



Chromedravite, Myanmar



Elbaite, California, U. S. A.



Feruvite, Japan



Foitite, Canada



Rossmannite, Canada



Magnesiofoitite, China



Olenite, Myanmar



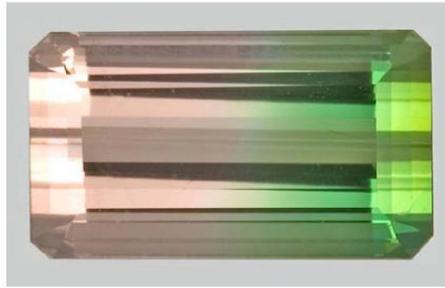
Uvite, Brazil



Vanadiumdravite, Brazil



Luinaite-(OH) Washington, USA



Blue cap" California USA "watermelon" tourmaline



## Secretary's Report

By Patricia Flavin

**Meeting Date:** March 6, 2013

**Meeting Place:** Cathy Kerby Rm.-CE 340, The Smithsonian National Museum of Natural History

**Meeting was cancelled due to inclement weather. No report.**

## Upcoming Events

### March:

**23-24:** 44th Annual Gem & Mineral Show sponsored by the Che-Hanna Rock & Mineral Club. Athens Township Volunteer Fire Hall, Sayre, PA.

**23-24:** 45th Annual Gem, Mineral, Fossil Show sponsored by the Buffalo Geological Society. The Fairgrounds, Hamburg, NY.

**23-24:** 43rd Annual Uniflour Gem, Mineral, Bead, Fossil & Jewelry Show sponsored by the Catawba Valley Gem & Mineral Club. Hickory Metro Convention Center, Hickory, NC.

**23-24:** Western Mass Mineral, Jewelry & Fossil Show sponsored by the Connecticut Valley Mineral Club. Clarion Hotel & Conference Center, 1 Atwood Dr; Northampton, MA (Exit 18 off I-91).

### April:

**6 - Thin Section Field Trip to Northern Virginia Community College From 1:30 pm** until you get tired. Meet in the Geology Lab, CS Building, Room 217. Annandale Campus of Northern Virginia Community College parking is best accessed off Wakefield Chapel Road.

**6 - 7:** Mineral Treasures and Fossil Fair co-sponsored by the Philadelphia Mineralogical Society and Delaware Valley Paleontological Society. Lulu Temple, 5140 Butler Pike, Plymouth Meeting, PA

**6 - 7:** Annual Spring Gem, Mineral and Bead Show sponsored by the Central Florida Mineral & Gem Society. Central Florida Fairgrounds, 4603 W Colonial Dr.; Orlando, FL.

### May:

**4-5:** 10th Annual Treasures of the Earth Show & Sale sponsored by the Mineralogical Society of Northeast Pennsylvania. St. Joseph Oblate Seminary, 1880 Rt 315, Pittston, PA.

**10:** 8:30 P.M. The Philosophic Society of Washington will host a lecture on the Mars Curiosity rover by the Chief Mission Scientist. <http://www.philsoc.org/2013Spring/index.shtml>  
<http://www.meetup.com/philsoc/events/96028302/>  
John P. Grotzinger, Fletcher Jones Professor of Geology, Chief Mission Scientist, Mars Science Laboratory, a/k/a "Curiosity". John Wesley Powell Auditorium, 2170 Florida Avenue NW, Washington DC 20008.

**EFMLS Convention & Show** hosted by the Island Rockhounds and Suffolk Gem & Mineral Club. Smithtown, NY. May 31 - Jun. 1-2: (**EFMLS Mtg.** May 31.) EFMLS Convention & Show. Hosts: The Island Rockhounds & Suffolk Gem & Mineral Club, Plainview, NY.

**[From: EFMLS NEWS Feb. 2013.]**

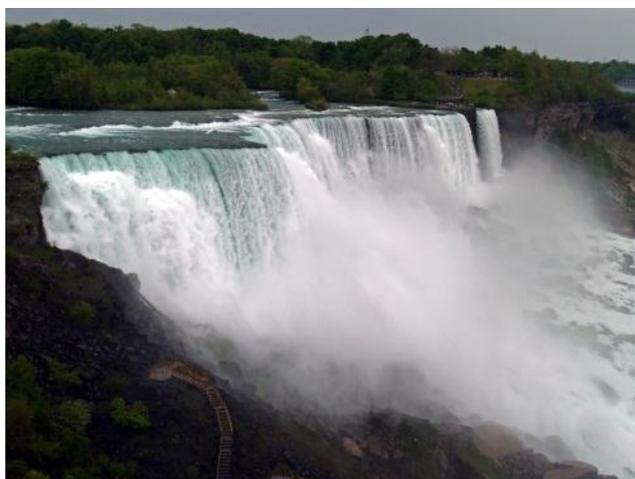
**Mark You Calendars!**

**Wildacres Spring Classes – April 8 – 14, 2013**

**Speaker in Residence - Bob Jones;**

**Wildacres Fall Classes – September 2 – 8, 2013**

**Speaker-in-Residence – Willow & Quintin Wight**



**Conservation** by Toni Donchak, Chair  
*EFMLS NEWS March 2013, P. 4*

As I write this article on Inauguration day it is important to remember our responsibility as American Citizens. That we can and should write to our Congressmen and our President and let them know our concerns about legislation.

On April 26, 2012 Senator Mike Lee introduced the Federal Land Designation Requirements Act S.2473.

The purpose of this bill is to prohibit the establishment of new units of the National Forest System, National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers System, National Trails System, National Wilderness Preservation System or any other system established by Federal law, or any other national conservation or national recreation area without approval of the applicable State legislature. It is believed that the bill will be introduced again in the new Congress. As a result, a new number will be assigned so check the Senate or ALAA web site ([www.amlands.org](http://www.amlands.org)) for updates.

Our representatives need to support the passage of this bill to protect States Rights. Voters and users must have an input into the use and management of Public Lands.

And while you're at it, join ALAA! Your membership will help strengthen the voice that ALAA has in working to keep our public lands open for the public. Membership is \$25 per year and \$50 for clubs.

Visit the ALAA web site ([www.amlands.org](http://www.amlands.org)) to get more information and to download an application.

## 2013 Officers and Board Members



(left to right: Steve Johnson, Rick Reiber, Patricia Flavin, Rebecca Siegal, Dave Hennessey, Dave Nanney, Andy Thompson, & Sheryl Sims)  
(photos provided by B. Thompson, A. Cameron Siegal, & S. Sims)

### Officers & Board Members Contact Information

**President:** Steve Johnson - [StevikJ@gmail.com](mailto:StevikJ@gmail.com); **Vice President:** Rick Reiber - [Mathfun34@yahoo.com](mailto:Mathfun34@yahoo.com)  
**Secretary:** Patricia Flavin - [pattiflavin@gmail.com](mailto:pattiflavin@gmail.com); **Treasurer:** Rebecca Siegal - [dcminalclub@gmail.com](mailto:dcminalclub@gmail.com)  
**Directors:** Dave Hennessey - [dhennessy@spa.com](mailto:dhennessy@spa.com); Dave Nanney - [DNanney@cox.net](mailto:DNanney@cox.net);  
Andy Thompson - [thompson01@starpower.net](mailto:thompson01@starpower.net); **Editor:** Sheryl Sims - [sesims4@cox.net](mailto:sesims4@cox.net)

**Thank You** to all who donated door prizes last year, provided refreshments, took photos, brought guests, shared mineral news, and made our club a great one by attending our meetings!

Please continue to support our club bulletin by sending me your mineral-related news, articles, photos and/or links. The *Mineral Minutes* newsletter deadline is the 15th of each month. You may email your submissions to me at <[sesims4@cox.net](mailto:sesims4@cox.net)>. Thank you! (Note: The Editor reserves the right to edit all submissions as necessary.)

### Treasurer's Note:

Treasurer, Rebecca Siegal



**2013 Dues!** \$20 for single memberships. \$25 for family memberships. Why not invite your friends and family to join MSDC?

Please send all treasurer-related emails to:  
[dcminalclub@gmail.com](mailto:dcminalclub@gmail.com)

**MORE REFRESHMENTS, PLEASE!** If you are able to bring refreshments to our monthly meetings, please do so. Your contribution will be greatly appreciated! **We are also looking for a volunteer or two to coordinate refreshments for our meetings.** Please let Steve Johnson or a board member know if you can assist.

**WELCOME! WELCOME! WELCOME!** Guests are always welcome to attend MSDC meetings. Please continue to invite your friends!

**Speaker Flash Back:**



(Microsoft Clipart)

- January 2013: Michael A. Wise, Ph. D, geologist in the Division of Mineralogy, for The Smithsonian National Museum of Natural History, gave a very interesting presentation on cathodoluminescence.
- February 2013: Cathleen Brown, Museum Specialist Rocks and Ores Division, for The Smithsonian National Museum of Natural History, addressed MSDC members on the topic of Pegmatites: What they are and where to find them.
- March 2013: Meeting cancelled due to inclement weather.

**MSDC RAFFLE!**



(photo by S. Sims)

**We have your winning ticket in the bag!**

**Thank you for your mineral donations. They will be used as door prizes.**

**MINERAL MINUTES**

**Pre-Meeting Dinner:** Join us for dinner at the Pier 7 Restaurant at 6:00 PM for dinner before the club meeting. 650 Water St SW, (at S L St), Washington, DC 20024, (202) 554-2500, www.pier7restaurant.com/Menu.

**Please call Susan Fisher at 703-830-9733 to make a reservation if you wish to attend.**

**Visitors are always welcome at our monthly meetings and dinners!  
MEMBERSHIP APPLICATION OR RENEWAL  
THE MINERALOGICAL SOCIETY OF THE DISTRICT OF COLUMBIA (MSDC)**

Family ~ \$25.00 per year. One address.

Individual ~ \$20.00 per year.

New \*  Renewal Dues are for Year \_\_\_\_\_ \*

For new members who join in the last months of the year, membership will extend through the following year with no additional dues.

**ANNUAL DUES – PLEASE PAY YOUR DUES PROMPTLY.**

Pay at next meeting or mail to:

**Mineralogical Society of DC**

**P.O. Box 9957**

**Alexandria, VA 22304**

**Name(s)** (First and Last)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone(s): Home/Work/Mobile \_\_\_\_\_

Email(s) \_\_\_\_\_

**OK TO INCLUDE YOU ON CLUB MEMBERSHIP LIST?** Distributed to Club members only.

Yes – Include name, address, phone, email.

If you want any information omitted from the membership list, please note:

Omit my:  Email,  Home phone,  Work phone,  Mobile phone,  Address,  Name

**SPECIAL CLUB-RELATED INTERESTS?**

**MINERALOGICAL SOCIETY OF THE DISTRICT OF COLUMBIA**

(2013 Officers & Board Members)

President: Steve Johnson, stevikj@gmail.com

Vice President & Program Chair: Rick Reiber, Mathfun34@yahoo.com

Secretary: Patricia Flavin, pattiflavin@gmail.com

Treasurer: Rebecca Siegal, dcmineralclub@gmail.com, (mail: c/o MSDC, P.O. Box 9957, Alexandria, VA 22304)

Director: Dave Nanne

Director: Dave Hennessey

Director: Andy Thompson, thompson01@starpower.net

Editor: Sheryl Sims, sesims4@cox.net

Co-Web Master: Betty Thompson & Casper Voogt, http://mineralogicalsocietyofdc.org/

**Meeting Dates, Time, and Location:** The first Wednesday of each month. (No meeting in July and August.) The National Museum of Natural History, Smithsonian Institution, 10<sup>th</sup> Street and Constitution Ave, Washington D.C. We will gather at the Constitution Avenue entrance at 7:45 PM to meet our guard who will escort us to the Cathy Kirby Room. Street parking: **THERE ARE NOW PARKING FEES, PAYABLE AT THE KIOSKS, AND ENFORCEMENT UNTIL 10 PM.**

# ***MINERAL MINUTES***



**Newsletter of the Mineralogical Society of the District of Columbia**

Mineralogical Society of DC  
P.O. Box 9957  
Alexandria, VA 22304  
U.S.A.



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April 2013