MWF News

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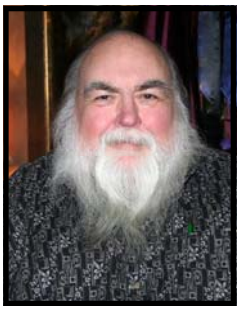
PRESIDENT'S MESSAGE

by Tony Kapta



Hello Everyone,

I hope you are all enjoying lots of rockhounding. The weather here in Central Illinois is great. The heat has stayed away for the most part and, even when the long range forecast calls for high temperatures, it seems that a storm will roll in and cool it off. I just hope this doesn't mean the fall will be cooler than normal. It can stay this way forever, as far as I am concerned.

We have the MWF convention approaching rapidly. It will be in Des Moines, Iowa, in conjunction with the Des Moines Lapidary Society/Central Iowa Mineral Society show, "Eons Exposed," on Saturday, October 18 and Sunday, the 19th, at the Paul Knapp Animal Learning Center, located in the Iowa State Fairgrounds, 3000 East Grand Avenue, Des Moines, Iowa 50317.

On Friday, October 17, there will be a pre-show field trip to a gravel quarry in the area. The pit will provide participants with the opportunity to collect and see ALL the "eons exposed"; granted, they are in a mixed-up jumble, but that's what glaciers do! Can you sort it out? The local experts welcome your knowledge to the challenge. Lakers and mammoth teeth are to be found, along with anything else that originated north of what is now Iowa. Indicate your interest on the 2014 MWF Convention registration form.

On Saturday at the Sleep Inn & Suites, 5850 Morning Star Court, Pleasant Hill, Iowa, there will be the State Directors' Meeting at 8:00 a.m., followed by the Executive Meeting at 9:00. The Council of Delegates Meeting will be at 1:00 p.m. at the same place, with check-in starting at 12:00.

So, while you are thinking about it, get your delegates chosen and send in the delegate form to me. Let's try to get at least 25% of the clubs represented at the council meeting this year. Of course 100% would be even better. This is your federation, so let's all try to participate.

Don't forget to submit your registration form to Karen Leibold before October 8th. To top it all off, we have a

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UPCOMING EVENTS

SEPTEMBER

5-7 **GREENFIELD, IN.** 500 Earth Sciences Club's Annual Show; Hancock County 4-H Fairgrounds, Apple Street; Fri., Sat., Sun. 10-6; Contact: Cheryl Hamilton, 317.897.6639, clhamilton1951@gmail.com.

5-7 **TOLEDO, OH.** Toledo Gem and Rockhound Club's Annual Show; Stranahan Theatre Complex, 4645 Heatherdowns; Fri. 2-8, Sat. 10-6, Sun. 11-5; Contact: John Capuano, 419.882.1733, jscapuano@yahoo.com, www.rockyreader.com.

12-14 **HOLLAND, MI.** Tulip City Gem & Mineral Club's Annual Show; Holland Civic Center, 150 W. 8th St.; Fri. 9-8, Sat. 9-7, Sun. 11-5; Contact: Jodi Miller, jodis05@charter.net, 616-250-5869, tulipcity.org.

13 **ROCKFORD, IL.** Rock River Valley Gem & Mineral Society's Rock, Mineral & Fossil Swap; Odd Fellows Hall, 6219 Forest Hills Rd.; Sat. 9:30-4; Contact: John Wood, 815.978.6960, gotwood63@gmail.com.

20-21 **HOWELL, MI.** Livingston Gem & Mineral Society's Gem, Mineral and Jewelry Show; Hartland Consolidated School, 9525 E. Highland Rd.; Sat. 10-6, Sun. 10-4; Contact: Chuck Amberger, 248.787.6586, camber459@gmail.com, livingstongemandmineralsociety.com.

26-28 **HAMILTON, IL.** Worthern Earth Searchers' Geode Fest; Wildcat Park, North 96 Route; Fri. & Sat. 7-5, Sun. 9-1; Contact: Mike Shumate, 217.491.1025.

26-28 **JOPLIN, MO.** Tri-State Gem & Mineral Society's Annual Show; Joplin Museum Complex, 504 Schifferdecker Ave.; Fri. & Sat. 9-5, Sun. 9-3; Contact: Chris Wiseman, 417.623.1180, jmc-cwiseman@sbcglobal.net.

27-28: **OSHKOSH, WI.** Oshkosh Earth Science Club's 43rd Annual Oshkosh Gem & Mineral Show; Sunnyview Expo Center, 500 E. County Road Y; Sat. 9-5, Sun. 10-4; Contact: Bob Fox, 920.235.4669, foxbooks@att.net.

27-28 **TRAVERSE CITY, MI.** Grand Traverse Area Rock and Mineral Club's Annual Show; History Center of Traverse City, 322 Sixth St.; Sat. 10-5, Sun. 11-4; Contact: Lauren Vaughn, 231.342.3613, tcrockhounds@yahoo.com, www.tcrockhounds.com.

OCTOBER

4-5 **JACKSONVILLE, AR.** Central Arkansas Gem, Mineral, & Geology Society's Annual Show; Jacksonville Community Center, 5 Municipal Dr.; Sat. & Sun. 9-5; Contact: Tom Sharp, 501.379.8653, thom61847@yahoo.com, www.centralarrockhound.org.

4-5 **JEFFERSON, WI.** Rock River Valley Geological Society's Annual Show; Jefferson County Fair Park; Sat. 10-5, Sun. 10-4; Contact: Steven Streich, 608.655.1011.

4-5 **SPRINGFIELD, IL.** Lincoln Orbit Earth Science Society's Annual Show; Illinois Building, Illinois State Fairgrounds, Sangamon Ave. & 11th St.; Sat. 10-6, Sun. 10-5; Contact: Ed Wagner, 309.838.7782, loesseditor@gmail.com.

10-12 **WARREN, MI.** Michigan Mineralogical Society's Greater Detroit Gem, Mineral, Fossil & Jewelry Show; Macomb Sports & Expo Center, Building P, 14500 E. 12 Mile Rd.; Fri. 9-6, Sat. 9-7, Sun. 11-5; Contact: Stan Woollams, 734.994.3048, wwooll@comcast.net, www.michmin.org/show.

CLUB ROCKHOUND OF THE YEAR NOMINATING INFORMATION

By Lee Herrera, Chairman

Below is the Rockhound of the Year data request list for anyone submitting a club member for the Rockhound of the Year award. Each club can submit a nomination every year. The award is given to an individual in their club, and not a competition between clubs.

The following information is required:

1. The person's name as it will appear on the award, the club's name, and location of the club, for example, West Suburban Lapidary Club, Elmhurst, Illinois.
2. The accomplishments that warrant why this person should receive this nomination.
3. The name and address where the award is to be sent, not necessarily the recipient. Include phone number and e-mail address in case of questions.
4. The year the award is for.
5. The date you would like to receive the award (optional), e.g., annual awards ceremony, Christmas party, etc.

PRESIDENT'S MESSAGE - CONT'D

(Continued from page 1)

great rock, mineral and fossil show to attend; does it get any better than that?

I have recently returned from Tulsa, Oklahoma, where I attended the American Federation of Mineralogical Societies (AFMS) convention. The convention was hosted by the Tulsa Rock and Mineral Society during their annual show. Congratulations go to the organizers of the show and the club for having a great AFMS and Rocky Mountain Federation of Mineralogical Societies (RMFMS) convention, as well as a fantastic show. Thank you for all your great work.

The AFMS meeting was held on Thursday, where we accepted the minutes of the last meeting, reviewed the reports from each of the officers, from each federation, and then the reports from each of the AFMS committees. Under unfinished business, we discussed the upcoming AFMS 70th anniversary and then, for new business, we approved the 2014-15 budget, elected new officers, and the President of the AFMS appointed the staff for the Central Office.

After the meeting, Jim Marburger and I stayed for the AFMS Scholarship Foundation meeting. Jon Spanaugle, AFMS scholarship foundation treasurer, reported that as a public charity (under IRS rules), 30% of the money that the scholarship fund takes in should come from donations. This year, the donations are down and we need $5000 more in donations by November 1st to make sure that we meet that 30%. So, if your club is planning on making a donation to the scholarship fund, please have that in by November 1st of this year.

Friday, Jim and Sharon Marburger, and Gina and I reported to the judge's room to act as clerks and learn more about how competitive cases are judged. This proved to be very eye-opening as to just what all is involved with judging display cases.

When we were finished helping the judges, we enjoyed the wonderful show that the club had put together. There were 28 dealers and 16 demonstrators, so there was a lot to see and enjoy, both on Friday and Saturday.

Saturday night was the awards banquet. The food was great and the entertainment was fantastic. It was Native American dancer Mike Pahsetopah, his wife Lisa, and daughter Heaven, performing as a Native American dance troop and story tellers.

I wish more of you could have made it to this wonderful event. The AFMS convention next year will be in Austin, Texas, October 23-25, 2015.

EDITOR'S TWO-CENT'S WORTH

by Sharon Marburger

As a side note to the President's Message, I would like to add that, although Jim and I reported to the judge's room to act as clerks for the judges, we were not needed. It was nice to see such a large turnout of those willing to judge and to act as clerks.

I would like to remind everyone who holds a Midwest Federation or American Federation office or chair that we are representatives of our respective organizations. We are the FACES of the organizations. How we present ourselves is a reflection of our organizations.

Without going into details or naming names, an unfortunate situation arose during the time we spent in the judging room. A sincere apology was offered for a misunderstanding, whereupon irritation, anger, and disrespect, followed by an exchange of unpleasant language, took place. I was appalled to have been a witness to this exchange, and, at that moment, ashamed to be associated with the national and regional federations.

I later sought out the apologetic person, who was visibly upset by the exchange, and thanked him for his apology. I reminded him that the actions of one should not be the basis on which to judge the Federations. He thanked me for my concern and gratitude, and agreed that the altercation was not with a federation.

So, again, please remember that the actions of one DOES affect how the Federations are perceived. The same holds true at the club level. We are the faces of our organizations; let's be proud, polite, and above all, respectful representatives.

COMPETITIVE DISPLAYS

by Barbara Sky

It is still a couple of months until the MFW convention in Des Moines, so you still have time to put together an exhibit for the show! I would like that exhibit to be a competitive exhibit! Remember - a club can enter a competitive exhibit also with at least 5 members contributing. (That means that no one person is doing all the planning and work of preparing the exhibit!) I'll find judges for any cases in competition! As long as I'm not in competition, any other mineral cases can be judged by me with help from a collector, even if not an official judge. COMPETE!!

2014 Scholarship Recipients

by Jim Marburger, MWF 1st Vice President

Arsen Chantooni was selected earlier this year as the 2014 MWF Scholarship Honoree. He has named the two students chosen to receive the AFMS Scholarship grants for the Midwest Federation.

Deserae Wojick: Deserae is pursuing a Master of Science degree in Geological Sciences at Iowa State University (ISU) in Ames, Iowa. She received her Bachelor's degree in Geological Sciences at ISU in 2013. In addition to her studies, Deserae teaches Stratigraphy/Sedimentation Lab and Geological Engineering Lab at the Department of Geological and Atmospheric Sciences of ISU.

Deserae plans to use the scholarship money to help with travel expenses to Houston, Texas next spring to present her research. Additionally, it will help pay for tuition and travel/living expenses for various foraminifera workshops/courses at other Universities over the summer of 2015, as no such workshops exist in Iowa. Any remaining portion of the scholarship would be used to help with living expenses in Ames, allowing her to continue research year round.

After receiving her Master's degree, Deserae would like to pursue a Ph.D. She plans to continue research in foraminifera culturing and do a small side project in petroleum geology. She hopes to secure employment with a petroleum geology company in the research and development area, as she is particularly interested in biostratigraphy and prospect analysis.

Come meet Deserae at the MWF Awards Banquet on October 18 in Des Moines.

2015 MWF Scholarship Honoree

If you or your Club would like to nominate someone, or a couple, for the 2015 MWF Scholarship Honoree(s), in recognition of their service to your Club and Community, details are described in the Green Pages of the MWF Directory, on our website www.amfed.org/mwf, or contact David Rich at birdman035@hotmail.com.

Joshua O'Brien: Joshua is pursing his Ph.D. in Earth Sciences at ISU, specifically studying the major and trace element chemistry of ferromagnesian minerals associated with metamorphosed massive sulfide deposits and the implications for exploration. Much of his work has centered on the world's largest massive sulfide deposit (Broken Hill lead-zinc-silver deposit, Australia). It is spatially associated with gahnite, but this mineral occurs for over 400 kilometers throughout the Broken Hill district. Given that mining companies have spent hundreds of millions of dollars drilling gahnite-quartz rocks with mixed success, determining the right gahnite-bearing rock will save a lot of money. To this end, Joshua has focused on the major and trace element composition of gahnite to see whether he can determine a chemical fingerprint that can be used characterize gahnite associated with sulfides from those that are not spatially associated with mineralization.

Joshua expects to complete his dissertation in the spring of 2015. Throughout his time at ISU, he has received financial support in the form of a teaching assistantship, which generally involves 20 hours per week of preparation, instruction, and grading of laboratory sections. Although this has afforded the opportunity and experience to teach various classes (e.g., hand sample mineralogy lab, optical mineralogy lab, and igneous and metamorphic petrology lab), it has reduced the amount of time available for research. Receipt of the scholarship will reduce his teaching load for one semester, thus allowing more time for research.

Joshua hopes to pursue a career in the minerals industry, working as a minerals exploration geologist or a mine geologist, preferably in a metamorphosed terrain that hosts massive sulfide Zn-Pb-Ag-(Cu-Au) deposits. Alternatively, a job working in the research laboratory of a mining company, conducting mineralogical studies to aid in mining and exploration, would be acceptable.

Submission of Articles

Material may be e-mailed to Sharon Marburger at mwf.editor@windstream.net, or submitted via the U.S. Mail (see address on page 1). Acceptable e-mail formats include MS Word (.DOC & DOCX), Adobe (.PDF), rich text format (.RTF), or plain text (.TXT). Pictures must be in png, jpg, tiff, or gif format. If e-mailing an article, it may be included within the body of the e-mail message or sent as an attachment. Thank you for your submissions!

CREATION OF AN INTRODUCTORY PRESENTATION ON FLUORESCENT MINERALS

Albert Liebetrau, #594, Powell Butte, Oregon
As printed in *UV Waves*, September 2013
Submitted by John Washburn
Reprinted with permission of the author

Sue and I belong to a relatively young rock and mineral club, the Central Oregon Rock Collectors (CORC). The club was recently invited to help a local rock shop celebrate its 40th anniversary. Club members demonstrated various activities and skills such as beading, jewelry making, cabochon making, rock carving, etc.

I prepared a display of fluorescent minerals. I had at my disposal a large metal storage container, about 10' x 16', open on one end and completely enclosed on the other three sides. By blocking the open end with tarps and blankets, we were able to make an acceptable display area where I could set up a table to hold my lights and several flats of minerals.

I anticipated that most visitors would be unfamiliar with the basics of fluorescence, except possibly that they would have heard of a "black light" (which proved to be true), and further, that many would only spend a short time in the display area (also true). So, I prepared a brief introduction to luminescence and fluorescence based on the information available on the FMS website. I also used that information to prepare a two-page handout that I could give to anyone who was especially interested (as well as the FMS Fact Sheet, of course). Finally, I also brought some fluorescent minerals and various common items that fluoresce, including wood (sumac), beads, glass, and postage stamps. And, of course, the clothing and jewelry of those present yield fluorescent items that always capture attention.

After a brief introduction to the energy spectrum that lasted 3-5 minutes, I showed a variety of fluorescent minerals chosen to illustrate various interesting features. My audience was small so I could successfully use a very informal style of presentation.

The entire presentation took between 20 and 30 minutes and I used about 20 specimens. People were continually coming and going, so I rarely did the entire presentation at one time. Rather, I did various parts, choosing topics insofar as possible to address the questions, preferences, or time limitations of those present. If time permitted, I concluded by showing some of my favorite specimens. Many of these had already been used to illustrate one or more of the properties highlighted above. Naturally, Franklin/Sterling Hill, Greenland, and Arizona were well represented.

Although I had a steady stream of visitors, rarely were more than five or six persons present at one time, so presentations were highly personalized. Overall, the "presentation" was very well received and our host got many favorable comments from visitors about their experience in the "black room".

So what is the point of this rather lengthy introduction? My main point is that having done the preparations for this presentation, it would be easy to do a similar presentation again. And with a bit more effort, it would be relatively easy to develop this presentation into a more formal program that could be given at a club meeting. In a formal program, more time could be used to introduce the energy spectrum and the concepts of luminescence and fluorescence. This introduction could be followed by a more leisurely discussion of the topics identified below. And, finally, more time could be spent addressing questions and actually looking at fluorescent minerals.

The outline of my presentation and the points I tried to illustrate are given below, followed by a list of specimens that I used. The outline could serve as the basis for a successful formal presentation, but it could easily be tailored by either deleting certain topics or adding others of interest. Similarly, the minerals used for this presentation came from my personal collection, but others could easily be substituted, provided they are chosen to illustrate the points in the outline they accompany. And you can minimize the number of specimens you need to carry by choosing ones that illustrate more than one of the properties or points that you wish to emphasize. The specimens I used were more than ample and they all fit easily in two mineral flats.

Outline of the Presentation

1. The Energy Spectrum
2. Introduction to Luminescence and Fluorescence
3. Interesting Properties of Fluorescent Minerals
   - Phosphorescence
   - Tenebrescence
   - Triboluminescence, etc.
4. Colors
5. Phantoms
6. Some Famous Fluorescent Mineral Localities
7. Fluorescent Minerals that can be Found Locally
8. Some of my Favorite Specimens

Minerals Selected to Illustrate Specific Outline Topics

- **Why don't we see fluorescence in daylight?**
  Fluorescence is still present, but the intensity of the white light usually overwhelms the fluorescent light. But sometimes the intensity of the fluorescent light is great enough that we do see it!
  Example: (1) Fluorite from the Rogerley Mine, Weardale, Durham, United Kingdom

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PRESENTATION - CONT'D

(Continued from page 5)

- **Properties of Fluorescent Minerals**
  - **Phosphorescence (after glow)**
    Examples: (2) Calcite from Little 38 Mine, Terlingua District, Brewster County, Texas
    (3) Sodalite from the Ilimaussaq Alkaline Complex, Narsaq, Kitaa, Greenland
    (4) Chlorophane from the Younon Mine, Shigar Valley, Pakistan
    (5) Strontian-Aragonite from Grossetto Province, Tuscany, Italy
    (6) Polymer (plastic)
  - **Tenebrescence**
    Examples: (3) Sodalite from the Ilimaussaq Alkaline Complex, Narsaq, Kitaa, Greenland
    (7) Sodalite var Hackmanite from Sar-e-Sang, Koksha Valley, Badakhshan Province, Afghanistan
  - **Triboluminescence**
    Example: (8) Sphalerite from the Horn Silver Mine, Beaver County, Utah
- **Color**
  - **Color change with varying wave length**
    Examples: (2) Calcite from Little 38 Mine, Terlingua District, Brewster County, Texas
    (5) Strontian-Aragonite from Grossetto Province, Tuscany, Italy
  - **Multiple colors**
    Examples: Specimens from Franklin/Sterling Hill, Greenland, or Arizona (some showing 5-6 different colors)
  - **Special**
    Examples: (9) Red fluorescing fluorite from Ojuela Mine, Mapimi, Durango, Mexico
    Corundum var ruby (10) natural and (11) synthetic
    And it's always a hit to check the jewelry of those present!
- **Phantoms**
  - **Example:** (12) Gypsum var Selenite (crystal) from Willow Creek, Nanton, Alberta, Canada
    (13) Topaz (crystal) from Mogok District, Myanmar (Burma)
- **Famous fluorescent Mineral Localities**
  - Franklin/Sterling Hill, New Jersey
  - Ilimaussaq Alkaline Complex, Greenland
  - Northern Pennine Ore District, United Kingdom
  - Various old mining localities in Arizona and California
- **Local Stuff** (always a hit!)
  - Thunder eggs (The Oregon state rock!)
  - Agate/chalcedony
  - Fossil wood
  - (14) Calcite from Gopher Valley, Yamhill County, Oregon

Complete List of Specimens Used in Presentation
(number, species, location)

1 fluorite: Rogerley Mine, Weardale, Durham, United Kingdom

2 calcite: Little 38 Mine, Terlingua District, Brewster County, Texas; **or** San Vicente Mine, Boquillas Del Carmen, Coahuila, Mexico

3 sodalite: Ilimaussaq Alkaline Complex, Narsaq, Kitaa, Greenland

4 chlorophane: Younon Mine, Shigar Valley, Northern Territories, Pakistan

5 strontian-aragonite: Grossetto Province, Tuscany, Italy

6 synthetic polymer (plastic)

7 sodalite var hackmanite: Sar-e-Sang, Koksha Valley, Badakhshan Province, Afghanistan **or** Mont Saint Hilaire, Montérégie, Québec

8 sphalerite: Horn Silver Mine, Beaver County, Utah

9 fluorite: Ojuela Mine, Mapimi, Durango, Mexico

10 corundum var ruby: Mysuru (Mysore), Karnataka, India

11 corundum var ruby (synthetic)

12 gypsum var selenite: Willow Creek, Nanton, Alberta, Canada

13 topaz: Mogok, Mandalay Division, Myanmar (Burma)

14 calcite: Gopher Valley, Yamhill County, Oregon

15 sumac: Yakima Valley, Yakima County, Washington

16 esperite & willemite: Franklin Mine, Franklin, Sussex County, New Jersey

17 hardystonite, calcite, willemite, & esperite: Franklin mine, Franklin, Sussex County, New Jersey

18 tugtupite, chkalavite, etc.: Tasaq East, Ilimaussaq Alkaline Complex, Narsaq, Kitaa, Greenland

19 calcite, fluorite, & willemite: 3 Color mine, near Sliver [*sic*] Bell Mine, Pima County, Arizona

(Continued on page 7)

PRESENTATION - CONT'D

(Continued from page 6)

20 sphalerite in barite: Hot Springs, Madison County, North Carolina

21 opal var hyalite: Chalk Mountain, Spruce Pine District, Mitchell County, North Carolina

22 wernerite & diopside: Grenville Scapolite Prospect, Quebec, Canada

23 calcite, humite, diopside, & aragonite: Long Lake Zinc Mine, Parham, Ontario, Canada

24 zircon: Rift Valley, Mineral Province, Malawi

25 calcite: found in rip-rap on the Oregon Coast, but likely from a quarry on the south side of North River, near Raymond, Pacific County, Washington

26 thunder egg Blue Bed, Richardson's Ranch, Madras, Jefferson County, Oregon

27+a selection of thunder eggs, fossil wood, and agate from various Oregon locations

2014 CONVENTION SILENT AUCTION

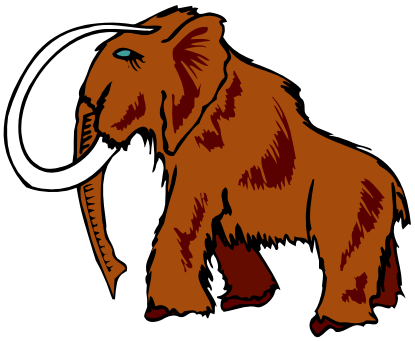
By Ed Dvorak, Silent Auction Chairman

Just a reminder about the "EONS EXPOSED!!" show and convention coming up in October at Des Moines, Iowa. The silent auction to benefit the MWF will be held at the Awards Banquet on Saturday, October 18, and we need donated specimens.

There is still time for field trips this summer, or checking the local areas. Remember to collect extra specimens for the silent auction. Since this silent auction will be limited to those attending the banquet, nicer specimens would be appreciated, however, nothing will be refused. If you have no place to store them, please contact me. If you live close to me, I will pick them up, otherwise, they can be mailed via priority flat rate mail. Thank you for your donations. You may call 402.946.3041 and leave a message or e-mail: ed20649@windstream.net.

EONS EXPOSED!!! MWF SHOW AND CONVENTION

by Karen Leibold



Fall is fast approaching! The 2014 MWF Convention is in the fall this year – you did not miss it. So…. Come to Des Moines and discover what eons of glacial activity brought to Iowa!

Our vendors bring fossils, gems, specimens, rough, slabs & cabs from all over the world; and the tools to expose and manipulate your finds into unique forms. Come view exhibits, displays, children's activities, and presentations focused on both the sciences and the arts involved in this ancient endeavor of exploring earth's treasures.

Special exhibits include the Mahaska County Mammoth and a Giant Sloth provided by the University of Iowa; a fluorescent mineral display tent; panels showing the origins of Iowa terra firma; and, many interesting & colorful smaller displays.

Presenters so far include the two MWF Scholarship winners: Deserae Wojick, Iowa State University (ISU), Marine Foraminifera (essentially marine amoeba with shells); and Joshua O'Brien, ISU; Gahnite (zinc spinel) as an Exploration Guide. Additional presenters include: John Hill, Iowa Keswick Agate; Chuck Safris, Animal Tracks – Ichnology; Jim Kraai, Rock Storyteller; John Franklin, Anticlastic Rising of Metal; Mike Whitney, Cabbing.

A pre-show Friday, October 17 field trip to a Des Moines area gravel pit will provide participants with the opportunity to collect and see ALL the "eons exposed" – granted, they are in a mixed-up jumble – but that's what glaciers do! Can you sort it out? Our local experts welcome your knowledge to the challenge. Lakers and mammoth teeth are to be found; along with anything else that originated north of what is now Iowa. Indicate your interest on the 2014 MWF Convention registration form.

All information and registration materials are on the MWF website. E-mail Karen Leibold, kcleibold@aol.com if you have questions. Hope to see you at the show.

AGATE, JASPER AND CHERT – OH MY!

Bill Cordua, MWF Geology Chair

As a geologist, I am often asked to do rock identification, often at mineral shows. I have several criteria I use for the numerous microcrystalline silica samples that I see. Here's what I look for. This is based on simple hand-specimen observation.

We should start with a very general term – microcrystalline quartz. This quartz has formed grains with an internal crystalline order, but the grains are too tiny to make out without a microscope. Within this heading is a huge variety of materials such as chalcedony, agate, chert, sard, jasper, etc. All are essentially SiO2, with various minor trace element impurities that, nonetheless, are crucial to the various colors we know and love. None are amorphous or glassy in character. Noncrystalline silica would be opal, if hydrated, or materials such as lechatellierite found in lightning-fused sands (fulgerites) and extraterrestrial impact sites.

Microcrystalline silica can have either a fibrous or a granular internal structure. Many specimens have some of both, leading to some of the ambiguity in nomenclature. For example a largely granular chert specimen can have a few local areas with banded internally fibrous agate. So what do you call the entire sample? If agate makes up more than half the sample, I call it an agate (the owner is happy!). If not, I may say chert with some patches of agate (owner is less happy – but trim off more of the chert and it can be an agate). Figure 1 is an example of a small area of agate embedded in massive chert. Many would call the whole thing agate, because it seems more desirable.

FIGURE 1
Sample of chert collected from near Spring Valley, Wisconsin with an area of banded gray to white "cold water" agate. The agate area is about 3 mm across. The enclosing chert sample is about 4 cm across.

Fibrous microcrystalline quartz specimens have a richer, more waxy luster than the more granular types, which tend to be dull. I put all these fibrous materials in the general category of chalcedony. Agate is the most popular type of chalcedony. For agate, I look for some aesthetic structure such as tight fortification banding, tubes, eyes, plumes or moss. There are many different sub-varieties of agate, but I try not to get into discussions of how they differ. If such aesthetic structures are not present – say the sample is a rather uniform gray or light blue - I just call the material chalcedony.

If the chalcedony is light to dark brown in color, I use the term sard. If it is red, I use the term carnelian. These terms are not very precisely defined. Since the colors can overlap, I have to make a judgment call. If it's reddish brown and you like the name "carnelian" better than "sard," that's fine with me.

Chysoprase is a bright green chalcedony. Prase and plasma are terms given to more leek green chalcedony, with prase being more translucent than plasma. These also grade into each other. Fortunately, these are scarce in the mid-west, so I don't often have to make a judgment call on them.

Let's now consider the microcrystalline quartz materials that are internally granular. These I generally call chert or flint if they are not strongly colored, usually gray, white, tan or black. There is no significant mineralogical difference between chert and flint. After consulting various sources, I have concluded that if someone can knap it into a tool, it's flint. Since I'm not a flint-knapper, I tend to call all this material chert. Chert is a sedimentary rock, and its origin is an entire article by itself. Some chert can be coarsely color banded, but lacks the luster and fortification banding seen in agates. Novaculite is a slightly metamorphosed, extremely durable chert best known from Arkansas. If the material is darker brown, yellow, red or orange, I use the term jasper. The coloring agent here is usually iron oxides. There is a lot of this material in glacial drift through the mid-west. It originates from the banded iron formations of Michigan, Minnesota and Wisconsin where jasper is interbedded with iron oxide-rich bands.

These color variations mentioned for both granular and fibrous materials are due to the distribution of various trace elements and optical flaws in the material, which clearly will vary from locality to locality and even spot to spot in the same specimen. I'll use a name based on what seems the dominant material in any one specimen.

I've noticed a vast proliferation in variety names for microcrystalline quartz, particularly for agates. These are often locality based and not very rigorously defined. I personally can see why this is done - to make a locality's material seem unique - but I think this can unnecessarily complicate things and interfere with communication. I do find the expansion of these terms to include materials that are not fine-grained silica to be unforgiveable. At a recent show, I saw banded calcite marketed as jasper. Sorry; that's a misidentification, to be polite about it.

I look for this article to generate a fair amount of comments, which I welcome as long as it's courteous. My e-mail address is wcordua@comcast.net. I am also happy for suggestions as to topics for future articles.

AFMS Endowment Drawing Prize Winners

by Donna Moore

The 2014 AFMS Endowment Drawing is now history. Thank you so much to those who donated prizes and those who bought tickets. It was a fun affair when I announced the winners at the banquet in Tulsa, Oklahoma. Several lucky winners were there, and got to take their prizes home with them. If you won, your prize should be arriving in the mail soon, unless it has already arrived.

Three tickets were first drawn from each federation, then the tickets were all combined and the rest drawn from the combined group. Those marked "AFMS" had only the person's name and were claimed at the banquet, so I don't know where the winners were from.

The following are the prizes, those who donated them, and those who won them:

#1. Framed Fossil Fish donated by Richard Jaeger (RMFMS), won by Ed Mattson (EFMLS).

#2. Mosasar Tooth donated by Dennis Westman (MWF), won by Hidemi Kira (AFMS).

#3. Page of Mineral Stamps donated by Barbara Sky (MWF), won by Cinda Kunkler (RMFMS).

#4. Monatana Agate/limb donated by Jim and Sharon Marburger (MWF), won by Jess Weiland (NFMS).

#5. Calcite Cluster donated by Jim and Sharon Marburger (MWF), won by Sharon Rouchon (SCFMS).

#6. Copper, mine certificate, miners tag donated by Pam Hecht (MWF), won by Randy Kluge (SFMS).

#7. Blue spinel necklace donated by Bob Miller (MWF), won by Sharon Rojow (CFMS).

#8. Honey onyx sphere donated by Emerson Tucker and Jim Matlock (SCFMS), won by Alan Hukill (MWF).

#9. Rhyolite sphere donated by Emerson Tucker and Jim Matlock (SCFMS), won by N.J. Lapidary Society, Joan Hoeckele (EFMLS).

#10. Green and white sphere donated by Emerson Tucker and Jim Matlock (SCFMS), won by Doris Keane (MWF).

#11. Citrine/amethyst necklace donated by Jennifer Haley, won by Harold Merrifield (RMFMS).

#12. Dugway geode pair donated by Steve & Carolyn Weinberger (EFMLS), won by Pete Williams (NFMS).

#13. Titanite crystal donated by Steve & Carolyn Weinberger (EFMLS), won by Mike Lang (SCFMS).

#14. Wulfenite on limonite donated by the Wichita Gem & Mineral Society (RMFMS), won by Colleen McGann (CFMS).

#15. Fluorite 1# 3 oz. donated by Lincoln Orbit Earth Science Society and Charles Mansfield (MWF), won by Lauren Williams, (NFMS).

#16. Fluorite 3# 5 oz. donated by Lincoln Orbit Earth Science Society and Charles Mansfield (MWF), won by Jerri Heer (SFMS).

#17. Wire wrapped necklace with fluorite pendant donated by Doris Keane (MWF), won by Merrill Dickinson (EFMLS).

#18. Signed Poster donated by Matt Charsky (EFMLS), won by Emerson Tucker (SCFMS).

#19. Druzy Quartz "Van Gogh's ear" donated by K.C. Foster (EFMLS), won by Sharon Marburger (MWF).

#20. Copper specimen donated by K.C. Foster (EFMLS), won by CMS (NFMS).

#21. Intarsia/chrysoprase, green and black jade donated by Richard Shackleton, won by Pat Tucker (SCFMS).

#22. Malachite Desk Set donated by J.C. and Donna Moore (MWF), won by Jim Darnell (SFMS).

#23. Blue lace agate necklace donated by Cathy Patterson (EFMLS), won by Liz Thomas (RMFMS).

#24. Necklace of Jet amber and shell donated by Cathy Patterson (EFMLS), won by Jay Gourd (AFMS).

#25. Turned wooden bowl donated by Marion Roberts (CFMS), won by Saco Valley Gem & Mineral (EFMLS).

#26. Maple Gem Tree donated by Jerri Heer (SFMS), won by Barbara Ringhiser (EFMLS).

#27. Bonsai Gem Tree donated by Jerri Heer (SFMS), won by Pamm Bryant (EFMLS).

#28. Imperial Jasper Cab donated by Bob and Nancy Hicks (RMFMS), won by Jim Huben (NFMS).

#29. Malachite/Azurite Cab donated by Bob and Nancy Hicks (RMFMS), won by Catherine Rouchen (SCFMS)

#30. Print of Fluorite on Quartz donated by Larry Sawyer (RMFMS), won by Warren Travis (SCFMS).

#31. Print of Mimetite donated by Larry Sawyer (RMFMS), won by Gerald Nagel (RMFMS).

#32. Print of Aquamarine Crystal on Albite donated by Larry Sawyer (RMFMS), won by John Rateike (EFMLS).

#33. Print of Diamond Crystal donated by Larry Sawyer (RMFMS), won by Kat Koch (NFMS).

#34. Print of Stalactic Malachite donated by Larry Sawyer (RMFMS), won by Katie Collins (EFMLS).

(Continued on page 10)

WINNERS - CONT'D

(Continued from page 9)

#35. Print of Elbaite Tourmaline donated by Larry Sawyer (RMFMS), won by Jennifer Haley (CFMS).

#36. Print of Cuprite Crystal donated by Larry Sawyer (RMFMS), won by Mary Bateman (EFMLS).

#37. Print of Chalcoalumite donated by Larry Sawyer (RMFMS), won by John Martin (CFMS).

#38. Coral Head donated by Suncoast Gem & Mineral Society (SFMS), won by Imelda Rocha (EFMLS).

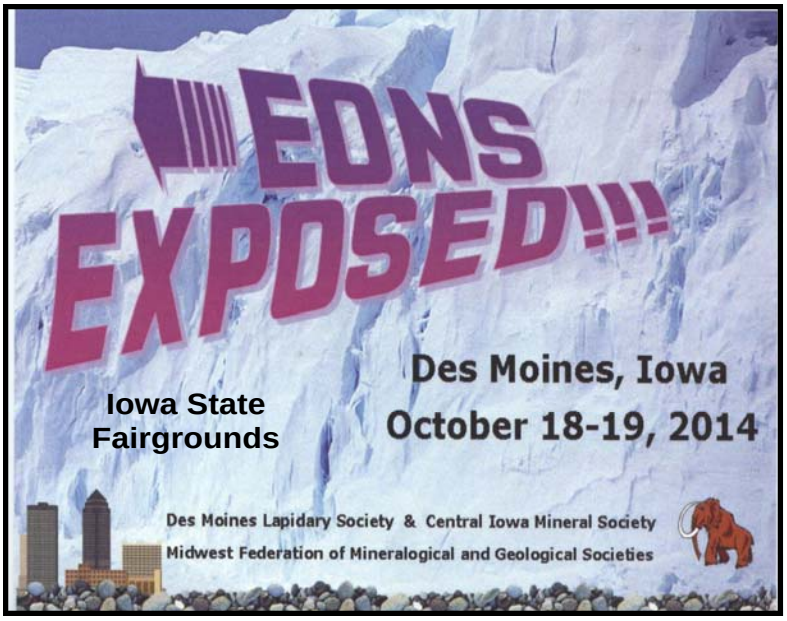
#39. Barn Painting on howlite slab donated by Jim Hird (EFMLS), won by Mike Nelson (AFMS).

#40. Log Cabin Painting on howlite slab donated by Jim Hird (EFMLS), won by Sharon Landrum (EFMLS).

We had representatives selling tickets and accepting prize donations in each of the seven federations. California Federation sold $455 in tickets; Eastern Federation sold $940 in tickets; Midwest Federation sold $610 in tickets; Northwest Federation sold $190; Rocky Mountain sold $830 in tickets; South Central sold $455 in tickets; Southeast sold $205 in tickets; bringing the total for ticket sales this past year to $3,685.

With a longer selling period this coming year (mid-July through mid-October), we hope to sell even more tickets. I have already had three prize donations for the 2015 drawing and hope to have more coming in very soon. They will be in the newsletter article for October.

The ticket sales, along with sales of Endowment pins and direct donations, bring our Endowment Fund donation total to $4,545.00. Well done, and thank you to everyone who donated prizes, money, or bought tickets.



SERENDIPITY EVENT

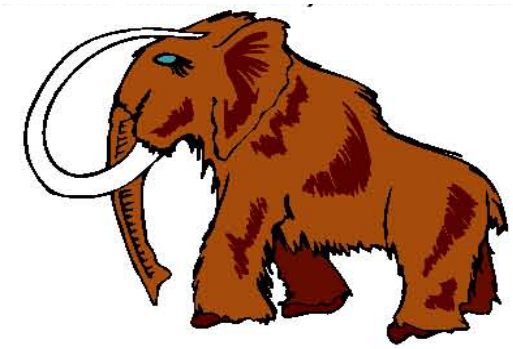
Submitted by Jerry Haavind, Coulee Rock Club of La Crosse, WI

We had our annual show in Viroqua, Wisconsin on June 7 and 8, 2014. Guests were asked for their e-mail address on a 3 by 5 card. On one card, I noticed a familiar name, "Kim Phetteplace." My wife and I had visited Phetteplace Museum in Wauzeka, Wisconsin in the 1970s. At about the same time, I was reading the June 2014 edition of the *MWF News* "Brief History of MWF" article that Tony Kapta wrote. In a short sentence for the year 1963 it states, "At the council meeting, they elected the first Honorary Member, June Culp Zeitner, and also the second, Joseph Phetteplace." I thought to myself, "Could Kim be a relative of Joseph?"

I decided to write an e-mail to Kim. Kim's answer was,

> Yes, indeed, I am a relative. My grandfather, Oliver Phetteplace, was a brother to Joseph's father. I remember visiting their museum as a child. My mom still wears a brooch that Great Uncle Joe made for her. When my sister and I graduated in the same year from high school and college (respectively), Joe sent us both inlaid cross necklaces. (Unfortunately, my son broke mine when he was a toddler.) I'm at my folks' home as I write this. Dad (Gordon) was thrilled with this e-mail. He said that Joe's dad got him started by grinding shells… .

For those of you not familiar with Joe Phetteplace's art form, Joe called it intarsia. He cut tiny pieces of Mother of Pearl or thin polished colored gemstones and fitted each piece to interlock with the others. It was a mosaic. It was also very labor intensive. I wrote an e-mail to Tony Kapta and I received an e-mail stating, "We had the Lincoln intarsia displayed at our GESCI show in Macomb, Illinois in 2012."



MIDWEST FEDERATION OF MINERALOGICAL AND GEOLOGICAL SOCIETIES
COUNCIL MEETING
DELEGATE REGISTRATION
Saturday, October 18, 2014

The Midwest Federation's 74th Annual Meeting will be held in conjunction with the 2014 "Eons Exposed!!!" Show and the MWF Convention, which is sponsored by the Des Moines Lapidary Society & Central Iowa Mineral Society, October 17th thru the 19th, at the Paul Knapp Animal Learning Center at the Iowa State Fairgrounds, 3000 East Grand Avenue, Des Moines, IA 50317. The Delegates' Council Meeting will be held at the Sleep Inn & Suites, 5850 Morning Star Court, Pleasant Hill, IA, (515) 299-9922. Each member club/society is entitled to one (1) Delegate and one *(1) Alternate to represent them.

The MWF Council Meeting will convene on Saturday, October 18th, at 1:00 p.m., with delegate registrations beginning at 12:00 p.m. at the Sleep Inn & Suites. The delegate appointed by your club or society will represent your interests, and may bring up pertinent discussions and proposals. However, in order to expedite matters, if your society intends to have its delegate present any special motion at the meeting, please notify the Midwest President, Tony Kapta, and the Secretary, Donna Moore, as to the nature of the subject so that it may be placed on the agenda. This needs to be presented in written form. This should be done at least one month prior to the meeting.

*Each club is entitled to one vote. An alternate may vote in the absence of the delegate. Guests are invited but will not be able to vote.

Please fill out this form and return it to the
CREDENTIALS CHAIRMAN
Tony Kapta
1483 E Wood St, Decatur IL 62521
217-233-1164, e-mail cigmc@comcast.net

(NOT to the show registration committee) BEFORE October 4, 2014.

THANK YOU FOR YOUR PROMPTNESS

✂----------

MIDWEST FEDERATION DELEGATE REGISTRATION FORM
PLEASE PRINT OR TYPE TO AVOID ERRORS

THIS IS TO CERTIFY THAT _____
Name of your club on this line

OF _____
City and State on this line

HAS APPOINTED THE FOLLOWING DELEGATE TO THE 74rd ANNUAL MEETING OF THE MIDWEST FEDERATION

DELEGATE _____

ADDRESS _____ **E-mail** _____

ALTERNATE _____

ADDRESS _____ **E-mail** _____

DATE _____ **SIGNED** _____, **CLUB PRESIDENT**

Sharon Marburger, Editor
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New Educational Geology Videos Online

by Dr. Bill Cordua, MWF Geology Chairman

Over the last few years, Dr. Bill Cordua, Midwest Federation Geology Chair, has made a number of short geology videos for the local cable television service. Most are about the geology of western Wisconsin, but two new ones may be of general interest, especially to newbies to mineral collecting. They are available free and on demand at http://rfctv.pegcentral.com/. Look under the "All Folders" drop-down menu for "Rock Talk." The newest ones are episodes 12 to 14. Rock Talk Episode 12 reviews meteorites versus meteor-wrongs (all in 10 minutes!). Episode 13 covers very basic mineral testing skills in 19 minutes. Episode 14 covers the ancient faults in western Wisconsin and lasts about 12 minutes. The series recently won some awards from the Wisconsin Community Media at their 2014 "Best of the Midwest Invitational." The awards were for "Best in show – best series by an amateur" and "Best documentary feature by an amateur" for "Rock Talk episode 11- Reading the Rocks in Interstate Park." Even those of more local interest give an idea of how geologists interpret rocks and the landscape they make.

Many of you ask why this editor doesn't publish award winners as soon as they are available. In this particular instance, I don't want to ruin the surprise for those attending the MWF Awards Banquet in October in Des Moines. Don't worry, I will publish all MWF winners and MWF winners of the AFMS competitions in the November newsletter.

Loss of two more friends

by Donna Moore, MWF Secretary

We have lost two members whose husbands served on the MWF Executive Committee.

Sandra Hukill passed away June 20 in Charlotte, Michigan. She was 73. Sandra and her husband, Alan, were members of the Central Michigan Lapidary and Mineral Society.

Sandra loved to read and play computer games. She raised cats and showed them, was an avid painter and jewelry maker. She also was a flower arranger and loved to fish.

Her husband, Alan, survives her. He is past president of the MWF and presently serves as the treasurer for the MWF Endowment Fund.

Judith "Judi" Ponzio passed away at her home in Plymouth, Wisconsin, on June 27 following a lengthy illness. Judith was 63. She and her husband, Kevin, were members of the Glacial Drifters Geologic Society. She served as secretary and treasurer of the club.

Judith enjoyed shopping, making jewelry, gardening, her dogs, and spending time with her loving family.

Her husband, Kevin, survives her. He is MWF Mineralogy Chairman.