



Colorado Mineral Society

Mineral Minutes



Volume 80, Issue 1

January 2016

President's Message

by John W. Smith

Hello everyone. I hope that all of you had a great holiday and a safe, happy New Year. As you may be aware, as we start the new year, I have the honor of being the Colorado Mineral Society's (CMS) new President. I would like to take this time to say thank you all for the confidence you have shown in me by electing a self-proclaimed amateur rockhound to this position.

Speaking of saying thank you, I would also like to take this time to say thank you to all of the board members and officers that served last year for their hard work and dedication. I especially would like to extend this thank you to Bruce Sales for leading us in both smooth times and rocky ones (yes – pun intended). Also, I am especially grateful as well to all of those individuals that have agreed to remain in their current positions.

It appears that we are going to have another exciting year ahead. While I am still getting my feet wet, from what I have learned so far we are working on getting some new and exciting speakers and are trying to expand both educational and field trip opportunities.

OK folks – now is the time to ask for help from each and every one of you. If you check Page 2 of this newsletter that lists the names of the various officers and board members you will notice a few that show as being vacant. We desperately need the help of each and every one of you to make this organization the best that it can be. It is unfair to ask the same individuals year after year to carry the load. If something seems to be within your skill set, please step up and volunteer to fill the slot. Even if it seems as though it might be outside your skills to carry the responsibility alone have no fear, others that know what needs to be done will help you out. That is why I ask each of you to contribute some of your time to help with administrative duties of the club as well as functional tasks (such as setting up the chairs, tables, etc. and putting things back at the end of the night). If everyone would take turns then it would make things easier for all.

In addition, I would like to seek ideas from each of you with regard to anything about club activities. This even means complaints. However, I insist that each “complaint” be accompanied by a suggested solution. This request is not a onetime request rather it is a standing one.

Enough for now. Hope to see everyone for the January meeting; note that the meeting will be held on the second Friday of the month and at a location different from the usual one. Good hunting to all!

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CMS General Meeting

Moved to January 8, 2016

Because the normal January meeting falls on January 1st, the CMS Board moved the meeting date to **January 8th**. The church is not available, so we will be meeting at the **Clements Community Center** located at 1580 Yarrow St. in Lakewood (near W. Colfax and Wadsworth) on the second floor, which is accessible by an elevator. Meeting time is the same at 7:30pm.

COLORADO MINERAL SOCIETY OFFICERS

2016

President: John W. Smith

First VP-Programs: Gary Rowe

Second VP-Education: Debbie Kalschauer

Secretary: Sandra Gonzales

Treasurer: Eva Siemonsma

Appointed Board Members - Committee Chairpersons

Annual Auction: Howie Houk

Door Prizes-Guests: Paul and Cindy Hatfield

Library: Kevin Atwater

Exhibits Chair: **OPEN**

Membership: Cara Reynolds

Membership Assistant: **OPEN**

Field Trip Leader: Gary Rowe

Field Trip Leader Co-Chair: **OPEN**

Nominations: Daryl Lamb

Grab Bags: Dale Block

Editor: Amber Brenzikofer 720-480-5234

Historian: Amber Brenzikofer

Scrapbook: Jennifer Knies

Junior Rockhound Coordinator: Lewis Reynolds

Junior Rockhound Assistant: **OPEN**

Hospitality: Star Edwards

Donations: Debbie Kalschauer

Web Master: Julio Edwards

coloradomineralsociety@comcast.net



Representatives (Board Members)

Denver Council Rep: Bruce Sales

Denver Show Rep: Dale Gann

COLORADO MINERAL SOCIETY (CMS) was founded in 1936 by a group of distinguished individuals within the mineralogical field. The organization was incorporated as a non-profit, educational organization in 1948. The Society is affiliated with the Colorado Federation of Gem and Mineral Societies, Rocky Mountain Federation of Mineralogical Societies, and the American Federation of Mineralogical Societies, a founding member of each group.

PURPOSE: To promote the study of minerals and other geologic materials, to encourage mineral collecting as a hobby and to conduct public meetings, lectures, and field trips, and to engage in all activities which relate to said purposes of the organization.

MEETINGS: General membership meetings start at 7:30 PM on the first Friday of each month, October through May, at St. Paul's Episcopal Church, at 10th and Garrison in Lakewood, CO. Displays are set up by members about one-half hour before meetings. Specimens may be available for sale and trade.

VISITORS and **GUESTS** are welcome.

BOARD MEETINGS: The board members meet once a month to complete the executive business and affairs of the Society. Meetings will start at 7:00 PM usually the third Tuesday of each month. Additional meeting times, if necessary, may be called by the President or any three members of the board and will be announced at the general or board meetings.

MEMBERSHIP: Open to all persons who agree to abide by Society rules and rules of the Federations. Annual fees: \$16.00 for a Family or Newsletter Membership, \$14.00 for a Single Membership, \$12.00 for a Senior Membership (single or family over 65), and \$12.00 for junior members under the age of 18

who are not included in a family. Name badges are available for a one-time fee of \$7.50.

ANNUAL EVENTS: Yearly activities include a silent auction of minerals, fossils, gems, jewelry, equipment and other items related to our interests; participation in the Colorado Contin-tail, the largest mineral swap show in Colorado; participation as a member of the Greater Denver Area Gem and Mineral Council in sponsoring the largest gem and mineral show in Colorado; and the Founder's Day celebration.

FIELD TRIPS: The Society sponsors several field trips from Spring through Fall for the purpose of collecting minerals, crystals, and fossils. These trips are one-day, two-day, and occasionally several-day adventures. A field trip guide is published each year in May.

NEWSLETTER GUIDELINES: CMS has a proud history of promoting the education and pure enjoyment of the mineralogical world. At the very heart of its existence are the many volunteers and contributors who spend their time and efforts in direct support of the club's mission. The CMS official newsletter **MINERAL MINUTES** is published monthly during the active meeting season (October through May) and a summer edition, and is the primary way the club's activities and mission are communicated to its members and prospective members. On that basis, the Board of Directors would like to offer the following content guidelines for CMS newsletter contributions:

- Formal announcements concerning club business and/or membership
- Information around mineral-related education opportunities or fundraising activities
- Stories or history that concentrate on the edifying aspects of mineral collection and education
- Sharing of personal mineral-related experience from field trips or other related adventures serving an educational purpose
- Announcements of volunteer/leadership opportunities for the club or club representation
- Worthy news events or discoveries related to mineralogy or geology that align to club's core interests
- Appropriate announcements regarding mineral shows, one-time mineral related events, mineral auctions, sale of private collections and/or equipment, etc.
- Information around relevant donations and/or gifts made available to the club or club members

Please note that the editor may correct spelling, syntax, or content to conserve space and is also entitled to bring contributions in compliance with newsletter guidelines

Any material herein may be reproduced by any club if proper credit is given. Material from many sources is used in the Mineral Minutes. While it is believed that these items are accurate, neither the editor nor CMS assumes any liability for their use. Advertiser's claims are their own, and their products are not warranted by CMS.

Deadline for publication is the 20th of the month prior to publication. All correspondence to Mineral Minutes should be sent to Editor, P.O. Box 280755, Lakewood, Colorado 80228-0755 or by email to:

editor.coloradomineralsociety@gmail.com

In Remembrance

A new CMS member, Carly Smyt who joined in November, passed away on 12/26/2015. DJ Vittum brought her to the November meeting and she joined the club and was looking forward to field trips this summer. She will be missed.

January Meeting Presentation

The Incredible Pyrite of Navajún, Spain by David & Jennifer Knies

An overview of the geological conditions necessary for pyrite formation will be outlined. The pyrite crystals from the Ampliación Victoria Mine, Navajún, La Rioja, Spain are found in many different forms. Most notably, the nearly atomically smooth perfect cubes, a must have in everyone's mineral collection. The pyrite (FeS_2) from this site is very pure, which is one of the reasons the perfect cubes could form. The unit cell and crystal structure will be described. Some examples of the more rare forms we collected will also be shown. The details of our collecting trip to Spain, along with many pictures and examples will be presented.

New CMS Members

First Listing

- Lanell Perry and Kent Gestring
- Brian Walko
- Thomas and Nancy Carr & family

Second Listing

- Carly Smyt
- Kathryn Nichols
- Ron and Ann Wankner
- DJ Vittum & family
- Derrick and Jennifer Moss & family
- Csaba Galambos & family
- Tessa Bopp and Zac Dieter Bopp & family

Per CMS Bylaws, comments concerning new, first listing members should be formally submitted to the President.

CMS Junior Rockhounds January Program

Topic: *The World in Miniature*

Overview: The biggest rock, mineral, or fossil is not always the best. Many wonderful specimens rich with crystals or full of interesting features are smaller than the size of a golf ball. The specimen sizes are called *miniatures* (less than 2 inches on a side), *thumbnails* (less than 1 inch on a side), or *micromounts* (requires 10x or stronger magnification to enjoy it). At the January meeting, we will discuss some special techniques for collecting, preparing, and storing these small specimens. We will have an opportunity to use a magnifying glass and a microscope to observe the beauty of the world in miniature.

Parents are invited to attend the Junior Rockhounds Program with their children. We need at least one other parent, guardian, or member to help supervise each meeting. Although the youth do not need any supplies for this meeting, a pencil or pen and a notebook may be helpful for taking notes.

This topic motivates *The World in Miniature* badge in the AFMS Future Rockhounds of America program. More information about these *optional* activities outside of our meetings can be found below. Lewis will be available after the Junior Rockhounds meeting to explain the badge requirements and to answer any questions you may have about this program. (Also review our goals in the Junior Rockhounds Program in the CMS Newsletter for August 2013, which can be found at

<http://www.coloradomineralsociety.org/newsletters/August2013.pdf> on pages 7-8.)

AFMS Future Rockhounds of America Badge Requirements (Optional):

http://www.amfed.org/fra/AFMS_FRA_Badge_Manual_Revised_2012.pdf

The World in Miniature badge is discussed on pages 177-186 of the manual.

Parents or guardians: please print the sign-off sheet on page 178 and check-off, sign, and date each accomplishment as it is completed. Submit the completed form to Lewis Reynolds to process the badge award.

Lewis Reynolds, Coordinator

December 4th Raffle News

Thank you to those who donated these great specimens, it is fun to see the happy smiles when their number is called to be a winner!!! December's tickets sold were \$185, with the retail value of \$220. These funds are spent on CMS education, the purchase of library materials, and the state science fair awards. The most popular specimen was the bookends of dyed agate from Mexico (\$85) from an anonymous donor and won by *Chris Keilman*. *John Smith's* ticket was drawn for the septarian nodule specimen (\$49) from the **Richard Owens Collection**. *Bob Heckman* won the wulfenite specimen (\$15) donated by **Self-A-Ware Minerals**. Bob was also lucky to win the psilomelane specimen from New Mexico (\$11) donated by **Rocky Mountain Gems and Minerals**. The sulfur specimen (\$14) from the **Charles Spletz Collection** was won by *Ron Lucero* who also claimed the muscovite specimen (\$12) donated by **Rocky Mountain Gems and Minerals**.

Thanks to Jennifer Knies and DJ Heckman for helping with the raffle. Congratulations to all our lucky winners!

Submitted by Amber Brenzikofer, CMS Deputy Raffle Manager



**Richard Owens
Collection**

**Charles Spletz
Collection**



Christmas Party Recap

From the desk of Eva Siemonsma.....

I'm hoping all had a great Christmas and are enjoying a happy and healthy New Year.



The 2015 Christmas party began at 6:30pm, starting with a quick election of 2016 officers and then it became an evening of whirling fun and frolic. The food was wonderful, thanks to everyone in attendance. Thanks **Sandra Gonzales** and **Viola Padilla** for taking on the hospitality role for the evening. Santa (thanks **K.P.**) arrived and the kids were drawn to the front for their gift bags. Thank you Santa bag helpers for your donations: **Gary Rowe, Christy Fischer, Ray Frost, Amber Brenzikofer, Debbie Kalscheur, Jerry Keifer, Carolyn Johnson Collection, GEODyssey, Sandra Gonzales, and Ditty Trust Estate**. The door prizes for the evening were many – 52 in all. The specimens were donated by **GEODyssey, Marcus Lieberman, Richard Owens, Self-A-Ware Minerals, and Marge Regal**. The Christmas tree table decorations and red doilies were donated and made by **Leslie Osgood, Susan Duncanson, Jennifer Knies, and Eva Siemonsma**. The cake steal ticket holders enjoyed stealing cakes from each other – the lucky winners and a lot of laughter generated \$67.00 for the general fund. Thanks **Leslie Osgood** for helping with cake steal. The mineral challenges were completed: Thanks **Sherman Marsh** for creating the Amateur challenge - the winners were 1st place Jim Linn, 2nd place Eva Siemonsma, and 3rd place Judy Geller. Each winner received a prize donated by **Self-A-Ware Minerals**. Thanks **Phil Pierson** for putting the Expert challenge together – the winner's were 1st place Bruce Geller, 2nd place Kevin Atwater, 3rd place Bill Harrison. Each winner received a prize from **Rocky Mountain Gems and Minerals**. Thanks **Lewis Reynolds** for putting the kids challenge together – the winners were Loky Heckman, Kevin Moss, Rylan Cross and Tessia Heckman. Each winner received a prize from **GEODyssey**. The raffle ended the evening bringing \$185 for the Science Fair Awards and library fund. Thanks **Jennifer Knies** for helping with the raffle.

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Christmas Party Recap (continued)

Thanks to all who helped setup and cleanup the hall, it was a great success because there were many hands making a big job seem small. Thanks too for bringing those yummy cakes, cookies, and brownies for the cake steal. It appeared on December 4th that all who participated were wearing smiles and visiting throughout the evening – enjoying the party. We have a great club with great members! I'm glad I am a part of it. Happy New Year!!! Additional photos from the party are located on the CMS website.



Changing of the guard (and Presidency), Bruce Sales to John W. Smith

Leslie Osgood selling tickets for the cake steal



Jr Rockhound mineral challenge

Santa (K.P.) and his helper Sandra Gonzales



Mineral Collecting in Colorado

by Leroy (Lee) Brown

Your reprint of the 1950 article "Mineral Collecting in Colorado" by Paul Humphreys in the December 2015 CMS newsletter brought back a personal memory of that 1949 mineral trip up Mt. Antero, so many years ago, led by Jim Hurlbut. I was just a 14-year-old boy, crazy about mineral collecting, and I was very surprised to see, among the Bill Hayward and Fred Lidinsky names, my own name mentioned by Paul as one of the participants.

Jim Hurlbut led most of the group up the Baldwin Creek side of Mt. Antero; but, Bill Hayward, Fred Lidinsky, and I hiked up the Browns Creek side of the mountain. We spent the night at timberline and made the final ascent the next morning where we met up with Jim's group at the saddle between Mt. Antero and Mt. White. Everybody took turns lugging the CMS historic, bronze plaque the rest of the way up the mountain to where the plaque was finally installed.

Regarding Paul Humphreys, Paul and I were two of the few teenagers on Jim Hurlbut's mineral-collecting trip up Mt. Antero, and we soon became fast friends due to our mutual interest in mineral collecting. Paul was a very adventurous, young teenager, as Paul traveled alone to Colorado from Indiana--then ventured alone throughout the Rocky Mountains. Paul's adventurous spirit is further enhanced by Paul's story of being chosen by Admiral Richard Byrd, as a representative of the Boy Scouts of America, to accompany the Admiral on his last exploration trip to Antarctica. Of note is the way Paul was able to travel around Colorado so quickly--by hitch hiking! Paul always wore his Boy Scout uniform when on the road! Who wouldn't pick up a Boy Scout? The following year, Paul and I traded a few specimens by mail before we lost contact with each other.

As I recall, it was very difficult to get a solid purchase for securing the plaque to the hard rock of Mt. Antero. On subsequent hiking/collecting trips up Mt. Antero in the '50's, I always checked on its precarious mounting. Finally, the jeep road was completed most of the way up Mt. Antero, thus eliminating the exhausting, hours-long climb for just a few short hours of collecting on the peak. When I last saw our CMS plaque in the 1970's someone had more securely attached it to the rock face. Since then vandals have either stolen or tossed that historic plaque down the mountain.

Since that first CMS trip up Mt. Antero, as a teenager in 1949, I continued to be attracted to that beautiful area of the Swatch Range. Thus, in the 1970's, I built my own mountain home at the base of Mt. Antero in a new subdivision just south of Anthropol, called Mesa Antero. This gave me a home base to access to the whole, upper Arkansas Valley from Salida to Leadville with all of its great collecting and mining history. In addition to Mt. Antero, Ruby Mt., the Sedalia Copper Mine, and the ghost mining town of St. Elmo are the great mines at Leadville and Climax.

As Paul Harvey said, "And that is the rest of the story."

Greater Denver Area Gem and Mineral Council

2015 Approved Grant Requests

The Greater Denver Area Gem and Mineral Council receives, evaluates and approves grant requests twice each year in March and September. This report is being sent to all eight clubs that are members of the Greater Denver Area Gem and Mineral Council to be published in their newsletter.

Dinosaur Ridge requested and received **\$5,000.00**. \$1,000 was used to defray the cost of Dinosaur Discovery Day and the remaining \$4,000.00 was used to repair and update seven interpretive signs.

The Western Interior Paleontological Society requested and received **\$1,000** to defray costs for volunteers to go to the Eastern Prehistoric Museum and to the Utah Field House of Natural History State Park Museum to assist the curator with a monumental backlog of computer work.

Colorado Mesa University requested and received **\$4,495.00** to purchase a Ward's Classic North American Rock Collection and thin sections with a case. They need the thin section slides for students to use with their 5 new petrographic microscopes.

The Denver Museum of Nature and Science requested and received **\$1,317.00** to purchase archival aluminum trays to house the rest of their micromount mineral collection.

Pueblo Community College Foundation requested and received **\$2,143.00** to help build a time trail on the Fremont Branch Campus. They will also be working on a new stegosaurus.

Front Range Community College requested and received **\$2,000.00** to purchase minerals to fill a case they had built. Their minerals had been stolen.

Each of the eight clubs can receive \$250.00 yearly from the Council to help defray their newsletter expense. Each club must have a representative present at all four Council meetings each year. In 2015 all but one club had a representative at all the meetings. If a club does not have a representative at one of the meetings, the club receives only a partial award. The newsletter grant money paid to the clubs was **\$1,937.50**. This grant money comes from the proceeds of the 2015 Greater Denver area Gem and Mineral Show.

The total grant money awarded during 2015 was \$17,892.50. All money awarded to the above listed organizations was funded by proceeds from the September 2015 Greater Denver Area Gem and Mineral Show put on by the eight clubs. The grant application and information is available at: denvermineralshow.com.

Council officers for the 2016 year are:

President – Martin Hannu	Treasurer – Maxine Sheel
Vice President – Joe Payne	Secretary – Sharon Hannu

Respectfully submitted, *Sharon Hannu, Secretary*

CMS Membership Dues Reminder

CMS memberships run from January 1st to December 31st. You can pay your dues in three ways:

1. Pay with cash or check at the general meetings the first Friday of each month from October through May. Look for the Membership Chairperson to obtain a receipt and membership card.
2. Send a check made out to "Colorado Mineral Society" or "CMS" to P.O. Box 280755, Lakewood, Colorado 80228-0755. Please do not send cash through the mail. Cards will be mailed to you.
3. Fill out a membership form and bring cash or check to a field trip to receive a temporary membership card.

CMS Membership Fees:

Family: \$16 per year

Single: \$14 per year

Senior 65+ (single or family): \$12 per year

Junior (<12 years old): \$12 per year

Also, due to RMFMS insurance and liability purposes, we need to know the month and year of your children's birthdays, so please provide this information when you renew your membership. The children's information will not be published. A new membership form is located on the CMS website at www.coloradomineralsociety.com.

If you ordered a name badge, they will be available at the general meetings to pick up. Alternative methods of delivery for name badges may be available, so contact Cara Reynolds to coordinate.

Tektite Gold: the *Making of a Pendant*, by Craig Hazelton

Ever wonder how hand-crafted jewelry is designed and fabricated?

Last Fall I was excited to be juried into the Boulder Open Studios Tour where I displayed my jewelry art. As part of the education mission of the show, we were asked to provide demonstrations on how our artwork is created. For this I performed a live demonstration of embellishing a cabochon with a metal lined lanyard hole using a diamond core drill, brass tubing, and plumbing tools that few people were able to see. I decided that a virtual demonstration (pictures and descriptions on Facebook and in emails) of making a pendant would be a fun way to reach more people. During the first weekend of the tour I displayed three stones that would be used in a pendant to be designed and fabricated during the following week. On the following weekend I displayed the completed pendant entitled “Tektite Gold” (Figure 1). This article is a collection of the posts and pictures from the virtual demonstration please enjoy!

Boulder Open Studios Tour (www.openarts.org) is an annual two-weekend art show where people can visit artists in their studio. I participated this year for the first time and displayed my jewelry at the BoMA studio (Boulder Metalsmithing Association, www.bouldermetalsmiths.com) in North Boulder. BoMA is a great organization where people can regularly see demos on metalsmithing, take classes, and affordably rent time in a fully equipped metalsmithing studio. Although my main studio is at home, I work at the BoMA studio from time to time and have taken several classes there including basic prong setting for faceted stones. Check BoMA out if you want to learn to make your own jewelry!

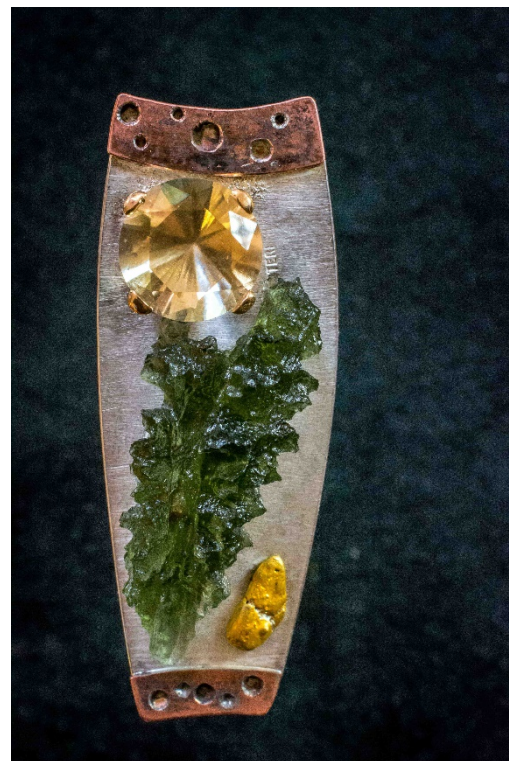


Figure 1: Completed Tektite-Gold Pendant

Stone Selection and Pendant Design

Usually my “pendant process” starts with the selection of the stone. Stones of significant beauty, rarity and interesting genesis or origin are significant factors in my stone selection process. Additionally, the presence of three objects can create an intriguing visual array. So... meet the choices: natural Moldavite, faceted Libyan Desert Glass and a gold nugget (Figure 2). The Moldavite and Libyan Desert glass are classified as tektites due to their origin during the release of energy during the interaction of a large meteorite with the Earth. Terrestrial material (soil, sand and rock) as well as extraterrestrial material (meteorite debris) are melted and blasted into the air and where it congeals, cools and solidifies returning to the ground as a tektite glass.

The high grade Moldavite from the Czech Republic (Besednice location) and has a wonderful green color and form. It's deeply furrowed surface texture is a record of its travel through the air (air flow induced grooves and folds), and differential stress as the outside solidifies before the core during the flight. The Besednice specimens have the best preserved surface texture of most Moldavites due to being safely deposited in a mud formation some 15 million years ago when the meteorite (5,000 feet across) impacted in Germany. The stone was procured through a trade for some Mt. Antero phenakite.

The yellow faceted tektite is Libyan Desert glass from the Sahara Desert. This is a rare gem grade (highly transparent and flaw-free) stone cut in Russia obtained in an aquamarine pendant deal with Impaktica of Denver (an excellent local source of meteorites and tektites). The exact interaction between the large extraterrestrial body and



Figure 2: The stones: Egyptian Libyan Desert Glass, California Gold, Czech Republic Moldavite

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Tektite Gold: the *Making of a Pendant* (continued)



Figure 3: Pectoral piece from King Tut's tomb with a carved Libyan Desert Glass scarab with lots of gold and legendary enamel and inlay work.

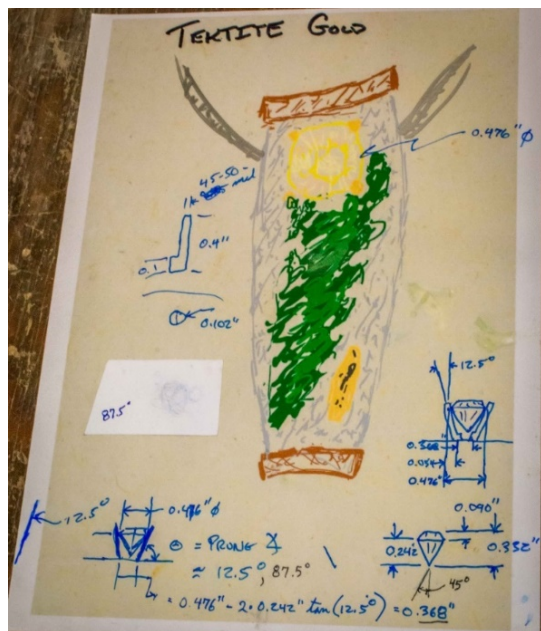


Figure 5: Detailed design sketch with calculations for prong geometry for the faceted Libyan Desert Glass

the Earth some 26 million years ago is interestingly under debate. It is not clear if the meteorite impacted the ground or exploded above the surface to create the yellow glass. Jewelry legacy note: a carved scarab beetle made of this material was found in King Tutankhaten's tomb (Figure 3).

Elements heavier than oxygen are created during the death of a star much larger than our Sun during a giant Super Nova explosion. This is the origin of all gold found on Earth. The California gold nugget was obtained in a trade for some old US silver dollars.

The key to visual success with this three-stone design is finding an intriguing arrangement. Layout iterations are a fun process for me using the drawing feature on my smart phone. Figure 4 shows some of the sketches I used to decide on a configuration I liked. Digital sketching has proven to be a powerful tool with a customizable stylus, thousands of colors, great undo and delete commands, and digital files that allow easy manipulation and convenient use on any digital device.

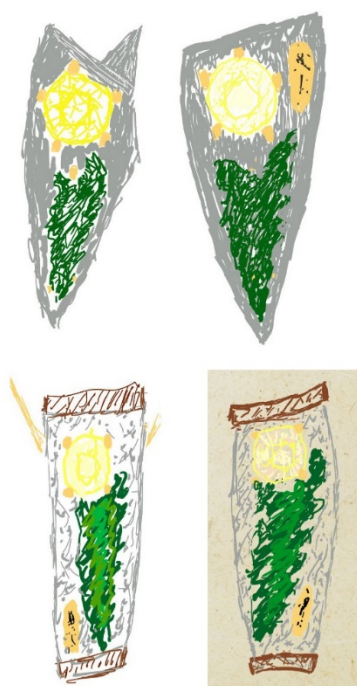


Figure 4: Digital design sketches from my Samsung Note 2 smart phone.

The arrangement process involved drawing and evaluating at least five versions of different positions and backing shapes. I'm happy with the final choice, but it took loads more time than I anticipated to come up with an arrangement that I really liked.

During the Open Studios show, I shared the BoMA studio space with four other artists who work incorporated a lot of amazing metalwork that definitely inspired the final design of this pendant (thanks guys!). The inspiration is manifested by a rough finish on the silver and curved copper end caps overlaying the silver to create vertical boundary and visual texture. The circular patterns on the copper are inspired by the Universe that made the three stones.

The final design spec is in Figure 5. Basic ingredients are seen with the design sketch, faceted Libyan Desert Glass dimensions and yes, trigonometry. Still an engineer, I work well when I can manipulate dimensions to know where I want to go.

Pendant Fabrication

The assembly and fabrication were performed at my personal studio in Lafayette. The stones and hidden-on-the-back bale (for the neck

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Tektite Gold: the *Making of a Pendant* (continued)

chain are all mounted on 20 gage sterling silver sheet to providing a durable foundation for the settings. Each stone required a different setting technique. The gold nugget was soldered directly to the silver backing, a straight forward and easy technique.

To mount the Moldavite, I soldered two pins to the silver and drilled blind holes in the stone that mated with the pins allowing it to be placed on and be supported by the pins (Figure 6). Epoxy was then used to permanently adhere the stone to the pins. This process I consider to be of medium difficulty.

The most difficult fabrication procedure, by far, was the construction of the prong setting for the Libyan tektite using 14/20 yellow gold filled wire (wire with a center of brass and a thick cladding of gold over the brass, Figure 7). The basic approach was to model the geometry of a pre-fabricated prong finding, and use the knowledge gained from the excellent prong setting class that I attended at BoMA a few months earlier.

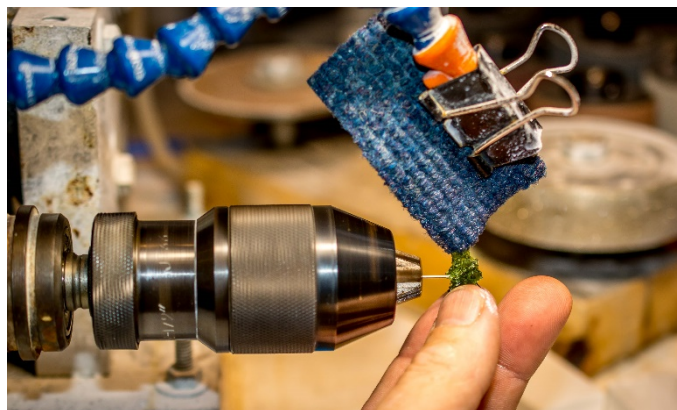


Figure 6: Drilling a blind hole in the Moldavite with a plated diamond drill in a horizontal point carver.



Figure 7: Roughed out gold-filled wire prongs for the Libyan Desert glass, and the prefabricated prong finding that was used as a model.



Figure 8: Drilling the holes with a drill press at 87.5° for the prongs.



Figure 9: Prongs just after soldering into position, coloring is from melted flux and is chemically removed.

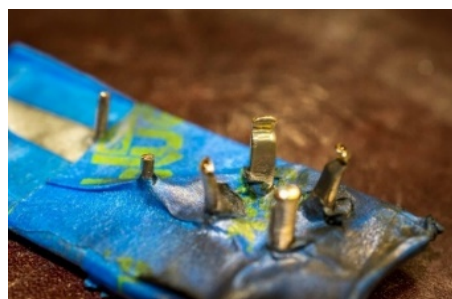


Figure 10: Prongs polished, and knotted to capture the girdle of the stone. Stone temporarily set on the prongs.

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Tektite Gold: the *Making of a Pendant* (continued)

After the prong job, I felt like I could do anything! A quick soldering of the gold nugget, pins for the Moldavite and copper end plates to the textured sterling silver (Figure 11) got me ready for stone setting (Figure 12).

Not exactly "Boom Done", but it worked and I will do it again. This custom prong technology/technique will allow me to use large faceted stones of any shape or size in my pendants, something I have been wanting to do. Even though I do a lot of lapidary (jade carving, cab grinding, etc.), my faceted stones are all purchased from other artisans. Recently I ran across some "had-to-buy" faceted stones at the gem shows that are "going into pendants" (Figure 13).

I hope this article will help other jewelry artists with technique and inspiration for their own creations. Possibly everyone else at least found it interesting. Maybe it will even inspire someone to start learning how to make jewelry. Jewelry art is a wonderful way to use, treasure and appreciate the amazing stones nature and the Universe have produced.



Figure 11: Fabrication and soldering of the metal components and gold nugget ready for the tektites.



Figure 13: Red Champagne Topaz (upper left) from the Tribute Pocket near Pike's Peak, Colorado obtained direct from the miner, Richard Federer. Ethiopian Wello Opal (lower left) and Oregon Sunstone (right) both cut by the legendary faceter, Jim Barzee (check out his how to videos

<http://www.marzeetutorials.com/2013/10/tutorial-beginning-faceting/>.



Figure 12: Capturing the Libyan Desert Glass in the prongs.

Craig Hazelton is a jewelry artist in Lafayette, CO doing original lapidary stonework, unique silver smithing and jade carving for his company Rock Out! . He likes to look for rocks to work on too.

craig.hazelton@hotmail.com

<https://www.facebook.com/RockOutbyCraig/>

http://www.rockygems.com/store/c20/Rock_Out!.html

CMS General Meeting on December 4, 2015

Bruce Sales called the meeting to order and welcomed everyone to the Christmas Holiday party.

Daryl Lamb read the nominations for the Board Officers:

CMS President – John Smith
Vice President – Gary Rowe
Second Vice President - Debbie Kalscheur
Treasure - Eva Siemonsma
Secretary - Sandra Gonzales

CMS members casted their votes and all were in favor of the nominations - none recorded for no.

The holiday party commenced with a potluck, games, gift exchange, and raffle.

CMS Board Meeting on December 22, 2015

Attendees: Bruce Sales, Eva Siemonsma, Amber Brenzikofer, Gary Rowe, John Smith, Cara Reynolds, Howie Houk, Sandra Gonzales, and Leslie Osgood

Old News:

Defining Family for membership - Put on next month's agenda - Cara will follow up with additional information.

Christmas Party- thanks to everyone for making this event special.

CMS Life Members:

Need to order name badges and honor members at January meeting.

Leslie and John Osgood, Jack Sliemers are new life members.

Cara will purchase the life badges and the Board will approve Life Membership.

John Smith will be assisting Cara with organizing Life Membership files.

Education - Debbie was not present at the meeting. Will talk about it at the next board meeting. Possible educational classes were presented (e.g., GIA - Star Edwards).

Board positions opened:

Membership Assistant, Field Trips Assistant, Display Chairman, Junior Rockhound assistant, Secretary

Denver Show Updates - Martin Hannou - voted show council President.

New Business:

Bruce Sales - Thank you for all the support and the support for the council trustee.

Eva Siemonsma - Treasure Report was made to the board and approved. She filed CMS paperwork with the Secretary of State for 2016. She also passed her test needed to continue being the CMS raffle manager; congratulations Eva!

We welcome new ideas for the Christmas Party next year.

Next meeting will take place on January 8th at the Clements Community Center, along with the February 5th, meeting.

The meeting starts at 7:30pm and we must be out of the building by 9:45pm. Little setup is required.

Howie Houk - May auction will be on May 7, 2016 from 11am-3:30pm. Will start recruiting volunteers, need a fluorescence chair, need a flyer for February meeting, need postcard/flyer for April show.

Amber Brenzikofer- Newsletter deadline: December 30th.

AFMS All American Club Scrapbook won the Bronze Award for Big Clubs - Great job.

Gary Rowe - working on guest speakers and field trips for 2016. Presentation for January meeting: Spanish pyrite by David and Jennifer Knies.

There are Educational funds that need to be spent by May 2016. Any ideas?

Cara Reynolds - New member's names were read to the Board.

The Jr. Rockhounding meeting will start at 7:30 to 8:15pm. Please do not disturb the group during this timeframe.

John Smith – Requested update of a calendar for meetings dates.

Meeting adjourned.

Submitted by Sandra Gonzales, Secretary



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FIRST CLASS MAIL



If the Metro Denver area declares the roads on accident alert during a snowfall on meeting night, consider the CMS general meeting canceled.

UPCOMING MEETINGS

CMS Meeting - January

Date: January 8, 2016 Time: 7:30pm
Place: **Clements Community Center**
(*different venue*)

CMS Meeting - February

Date: February 5, 2016 Time: 7:30pm
Place: **Clements Community Center**
(*note different venue again this month*)

Rocky Mountain Federation News

The Rocky Mountain Federation of Mineralogical Societies (RMFMS) is made up of 78 clubs representing 13 Western states. The Rocky Mountain Federation News is published monthly and is located at www.rmfmts.org.



A.F.M.S Newsletter

The American Federation of Mineralogical Societies (A.F.M.S) serves seven regional federations, including RMFMS. The A.F.M.S Newsletter is published monthly and is located at <http://www.amfed.org/news/default.htm>



<http://www.coloradomineralsociety.org>