Canaveral Moonstone





Presidents Corner

August is coming to a close, and although the calendar reflects it is now fall you could fool me with this unrelenting Florida heat.

For those of our members who are returning to Florida to enjoy the warm fall and winter that we offer, welcome back! I hope to see you enjoying our workshop.

September brings us only two months away from our 48th annual Parade of Gems! We had a successful planning meeting on August 11th, and as always, we are leaning on our ever-present volunteers to make this year's Parade of Gems a success. If you haven't done so already, please see our Chairperson Dave Wayment to determine where you can plug-in and get involved.



The Southeast Federation of Mineralogical Society has been creating a new website. It is much more user-friendly and streamlined below is a copy of the new link. https://www.southeastfed.org/

In addition. Danny Griffin, 2nd VP of SFMS has recently contacted me to inform our club that a new Florida state director is on the slate for election. Mary Jo Theobald. She currently holds the position of Florida Assistant State Director. Additionally, I believe she is the previous president of the Port St Lucie club. In accordance with the SFMS Constitution and Bylaws all Florida clubs have the opportunity to discuss and vote on this change. Please be prepared to cast your vote at our next meeting, on September 1 in our TEMPORARY meeting location at the Melbourne Auditorium west wing.

Looking forward to seeing you all.



Melissa Horan

CMGS President 2021

Exchange Bulletins are Welcome

(All material may be copied unless otherwise noted if credit is given)

The Dead Line for the October Moonstone is September 20, 2021.

The URL for CMGS web site is: http://www.canaveral-mgs.com/

The Canaveral Mineral and Gem Society (CM&GS) is a registered Florida not-profit-corporation approved by the Internal Revenue Service as a tax exempt, organization under Internal Revenue Code section of Florida 501 (c) (7) for the following purposes:

- 1. For the preservation, support, and promotion of the hobby of Mineralogy and its various forms of allied activities and earth sciences.
- 2. To dedicate ourselves to the furtherance of the hobby through the exchange of knowledge, experience, and other helpful information among ourselves and other like organizations.
- 3. To further the education of members and the general public of the hobby by programming talks, discussions, motion pictures, field trips, and the staging of shows and exhibitions.
- 4. To maintain an active affiliation with the Southeast Federation of Mineralogical Societies and to participate in Federation activities to the fullest extent possible.

Goals and Objectives

- 5. To promote the spirit of cooperation and fellowship among the membership.
- 6. To increase our knowledge of rocks and minerals and to explore the mystery and wonder of the earth.
- 7. To actively encourage members to attend educational classes, workshops, lectures, and demonstrations.
- 8. To stimulate interest in the earth sciences within the community by providing scholarships to worthy students at all educational levels.
- 9. To provide the necessary equipment and resources to enable members to develop their interests.
- 10. To enjoy our hobby and Have Fun!

Affiliations

The Canaveral Mineral and Gem Society is a member of the Southeast Federation of Mineralogical Societies (SFMS) and the American Federation of Mineralogical Societies (AFMS)

Meetings and Dues

Meetings are the First Wednesday of each month (except July and August) at the Melbourne Front Street Civic Center. Meetings start at 7:00 p.m. Visitors are always welcome! Dues are \$30.00. Junior Member dues are \$2.00. Club shop is now located at 255 East Drive, Suite K, Melbourne, FL.

September 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 Open Shop 11am-3pm	2 Open Shop 5:30—9:30pm	3	4 Open Shop 8:30—12:30pm
			Meeting at Mel- bourne Audito- rium 7PM			
5	6 Open Shop 5:30—9:30pm	7	8 Open Shop 11am-3pm	9 Open Shop 5:30—9:30pm	10	11 Open Shop 8:30—12:30pm
12	13 Open Shop 5:30—9:30pm	14	15 Open Shop 11am-3pm	16 Open Shop 5:30—9:30pm	17	18 Open Shop 8:30—12:30pm
19	20 Open Shop 5:30—9:30pm	21	22 Open Shop 11am-3pm	23 Open Shop 5:30—9:30pm	24	25 Open Shop 8:30—12:30pm
26	27 Open Shop 5:30—9:30pm	28	29 Open Shop 11am-3pm	30 Open Shop 5:30—9:30pm		

Meeting are being held at the Melbourne Auditorium

Presentation at our October meeting

Debbie Jorgenson will present at the October meeting.

This is a natural turquoise 14MMx20MM. Created by Art DeLaurentis





Canaveral Mineral and Gem Society August 3rd, 2021 Meeting Minutes

President Melissa Horan opened the meeting Wednesday, August 3rd at 7:07 pm at The Melbourne Front Street Civic Center, Melbourne, FL.

Melissa welcomed 6 new members and recommended all new members check out the CMGS Website and Facebook. New members can sign up for classes in the book that sits on the table at meetings.

Our speaker, Bill Harr, gave a very informative talk on the Chemistry of Silversmiths. He said one of the most important things with the chemistry of silversmithing is when you melt pure silver it absorbs 20 times its weight in oxygen and when it cools it releases oxygen. He gave tips for helping silversmiths to prevent copper from getting on your project.

Bill mentioned that he has extra boxes of beads and will be auctioning them off in the next few months. Look for his emails.

Secretary, Mary Kinberg – Melissa asked if there were any corrections or additions to the June minutes. As there were none, the minutes were approved as written in the Moonstone.

Dave Wayment has volunteered to take on the Parade of Gems (POG). He asked that all members that can help with the POG please meet next Wednesday night at the workshop at 6 pm.

Melissa also mentioned, if you go to the club, take some magazines that are on the floor in the box – they are Lapidary Journal magazine or Rock and Gems magazines. You can double check with whoever is assisting at the club. These magazines will not be for sale at the auction, they are to be given away now.

We need quality pieces for the monthly scholarship raffle for William Holland and Wild Acres. Please give your donations to Janine.

Membership, Kathy Burnette - said we are up to 123 members. Membership is now prorated at \$15.

Treasurer, Liz Ritter - paid for the 6-month shop rental fee among other bills. We paid \$1500 for the Treasure Coast Gem Club supplies and we made \$2,166, at the July 10th auction, which included these items from the Treasure Coast and donations from Roy Deere's family. Treasure Coast also donated \$100 to our club for cleaning the space out.

Education Chairman, Dave Wayment – spoke about William Holland and what a benefit it is to go for a week for \$425. That amount does not cover your class fee and class supplies but if you win the scholarship the \$425 is covered by the club. Dave also said the 18 inch saw has been fixed. The sawblade starts at about \$300 so please be careful when using it. Dave reminded everyone, if you check out a book from the library, please sign the book out and make sure you bring it back.

Dave Jacobson spoke on calcite. Dave has found calcite crystals while walking the beach. It's one of the most common minerals and most people have it as one of their first minerals in their collection. It's too soft to make good jewelry. Thanks Dave.

Show and Tell: Thanks for all of the informative and amazing show and tell projects!! This is a wonderful way to teach all of us. Art DeLaurentis made a stunning malachite knife. He bought the malachite from Roy Deere's estate. His turquoise ring was also amazing. Debbie Jorgensen made a beautiful aquamarine necklace with an open back. Scott brought in different forms and varieties of colorful calcite. Cheryl Synder recently went to Franklin, North Carolina and mined two different mines. She brought back a bucket of jade and some interesting other stones. She highly recommended going to the gem museum in Franklin.

Secretary, Mary Kinberg

Central Florida Mineral & Gem Society Show - 09/25/2021

Start Date: 09/25/2021 End Date: 09/26/2021

Hours: Sat 9:00-5:00 Sun 9:00-4:00 Venue: Sanford Civic Center Address: 401 E Seminole Blvd

Sanford Civic Center Sanford, FL 32771

Website: http://www.cfmgs.org/

Florida Fossil Hunters Fair - 10/16/2021

Start Date: 10/16/2021 End Date: 10/17/2021

Hours: Sat 9:00-5:00 Sun 10:00-4:00

Venue: Sanford Civic Center Address: 401 E Seminole Blvd

Sanford Civic Center Sandord, FL 32771

Website: http://www.floridafossilhunters.com/
St Lucie County Rock & Gem Show - 10/30/2021

Start Date: 10/30/2021 End Date: 10/31/2021

Hours: Sat 9:00-5:00 Sun 10:00-4:00 Venue: Mid Florida Event Center Address: 9221 SE Civic Center Place

Mid Florida Event Center Port St Lucie, FL 34952

Website: http://www.slcrockandgem.org/

Upcoming Mineral and Gem Shows 2021

Tampa Bay Mineral & Science Club Show - 11/06/2021

Start Date: 11/06/2021 End Date: 11/07/2021 Hours: 10:00 - 5:00

Address: 302 S Maryland Ave

Plant City, FL 33563

Website: https://tampabayrockclub.org/

Types: Rock & Mineral Shows

Parade of Gems

Jewelry & Gem Christmas Gift Show - 11/13/2021

Start Date: 11/13/2021 End Date: 11/14/2021 Hours: 10:00 - 5:00

Venue: Melbourne Auditorium Address: 625 E Hibiscus Blvd

Melbourne, FL – Website: http://www.canaveral-mgs.com/

Gem & Mineral Show - 11/20/2021

Start Date: 11/20/2021 End Date: 11/21/2021 Hours: 9:00 - 5:00

Venue: South Florida Fairgrounds Address: 9067 Southern Blvd South Florida Fairgrounds West Palm Beach, FL 33411 Website: https://www.gmspb.org/

Bench Tips by Brad Smith

Work Smarter & Be More Productive With Brad's "How To" Jewelry Books

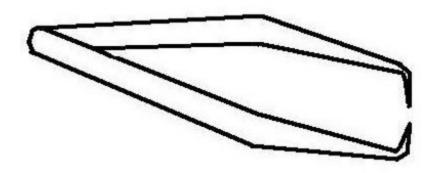
Amazon.com/author/bradfordsmith

FIND THE BALANCE POINT

With odd-shaped pendants or earrings it's often difficult to find the right place to attach a bail or loop so that the piece is balanced and hangs straight.

A quick way to make a tool for this is to modify a set of tweezers. Any set of tweezers will work. Spread the tips, sharpen them with a file, and bend the tips at a right angle to point towards each other.

To use the tool, suspend the pendant or earring between two sharp points to see how it will hang.





Solve Your Jewelry Making Problems With

Brad's "How To" Books

www.amazon.com/author/bradfordsmith

Mineral Of The Month - Diamond

By Dave Jacobson

http://mineral.galleries.com

This month we will take a brief look the hardest mineral on the Mohs scale, with a reading of 10, diamond, C, crystallized carbon. Diamond is used a gemstone and an industrially as an abrasive. As lapidaries and faceters we are using diamond all the time. Small diamonds are also used as specimens in mineral collections. Some of the more famous localities where diamonds are found are: South Africa and several other localities in Africa: India, Brazil, Russia, Australia and Arkansas in the United States. In the December 1998 issue of *Rock & Gem* magazine there was an article about diamond collecting in Crater Of Diamonds State Park, in Murfreesboro, Arkansas.

Some interesting facts follow. Diamond is a very good thermal conductor. It is 5 times better than the second-best thermal conductor, silver. Diamond has the highest melting point which 3820 degrees Kelvin. Diamond has the greatest lattice density which means the atoms are packed tighter together than in any other substance. Diamond also transmits light over a greater range of wavelengths (from ultra violet through the far infrared) than any other substance.

Diamond is in the isometric crystal system. Typical habits are cubes and octahedrons. Diamond has perfect cleavage in four directions, which means, as hard as it is, if it receives a hard blow in one of these directions it can split. In a diamond each atom is at the center of a tetrahedron of four other carbons creating an extremely strong framework although in one direction the structure has fewer bonds resulting in the cleavage plane. This cleavage plane repeats via symmetry to form an octahedron. Diamond comes in many colors with variations of each color including yellows, browns, grays, white, blue, black; reds, greens and colorless. Specific Gravity is 3.5. Hardness is 10. Streak is white.

Diamond and graphite are both polymorphs of the element carbon. Both are carbon but have completely different forms and structure. Some interesting facts about both follow:

Graphite
One of the softest minerals
Good conductor of electricity

Good lubricant Opaque Hexagonal crystal system <u>Diamond</u> Hardest mineral

Insulator

Ultimate abrasive
Usually transparent
Isometric crystal system

The differences between diamond and graphite are due to the atomic structure of each mineral. In graphite the atoms are closely spaced in planes with wide spacing between the adjacent planes. There is a tight bond between the planes of atoms but a weak bond between the adjacent planes. In a diamond the atoms are equally spaced. Each atom is at the center of a tetrahedron of four other carbon atoms creating an extremely strong framework.

Diamond takes its name from the Greek adamas meaning "invincible" or "hardest".

I used the following reference materials in preparing this article:

A Field Guide to Rocks And Minerals by Frederick H. Pough.



Mineralogy For Amateurs by John Sinkankus.

Simon & Schusters Guide to Rocks And Minerals.

Gemstones Of The World by Walter Schumann.

The Audubon Society Field Guide To North American Rocks And Minerals by Charles W. Chesterman.

Gems, Crystals, & Minerals by Anna S. Sofianides, George E. Harlow and George W. Robinson, Ph. D.

Amethyst Galleries Mineral Gallery on the Internet at http://mineral.galleries.com.

Rocks And Minerals by Chris Pellent

Min Search a shareware mineral identification program by *dp* Software, Warren, New Jersey.

The SFMS Wildacres Workshops are online. Please go to <u>sfmsworkshops.org</u> for class descriptions and instructor bios. Below is a list of classes. They're starting to fill up, so don't wait too long.

William Holland has been cancelled for 2021

SFMS Wildacres Workshops 9/13-19/21

September 13-19, 2021

Chuck Bruce - Silver III - Inlay II Cindy Moore - Metal Mania Mary Lou Hillenbrand - Chain Bill Harr - Casting Jerri Heer - Gem Trees Tom Slavicek - Leather

For more information contact the SFMS WA-Registrar: Claudia Erwin registrarwildacres@gmail.com

or Call: 865-973-1933

POG SHOW COMPETITION

Want to buy things at our Show, November 13-14? Me too! Here's a way to get free bucks to spend!! ENTER THE COMPETITION.

For years, I thought I wasn't good enough. But you may be the only one who enters a particular category, greatly increasing your odds to win POG BUCKS!

We have two types of competitions:

- Club Favorite/Parade of Gem's Grand Price Bring any type of jewelry you've created to be displayed at the November meeting. Member's will "vote" on the piece they like the most. The piece that gets the most votes becomes the Grand Prize for the Parade of Gems. Competition pieces will be numbered and members will place the number of the piece they like best in a bag, whichever piece gets the most votes wins. (Note, you will be reimbursed for the cost of your materials, up to \$75 if your piece is the winner. The winner will be identified at the meeting.
- Judged Competition Judging will be done by Dave and Leslie Wayment following the AFMS Uniformed Rules. No matter you skill level, be gutsy and join the competition. You're competing against the American Federation of Mineralogical Society guidelines, not one another. We will display your pieces at the show (securely behind glass), which helps people see what they can learn by joining us. PLEASE JOIN THE FUN! And you'll get POG Bucks to be spent at vendor's booths at the show. Prizes to be awarded at the show for each category, 1st Place is \$25, 2nd Place is \$15, and 3rd Place is \$10...

Announcing

CM&GS Single Piece Competition

We will again be holding a single Piece competition open to all CM&GS members. This is your chance to show off your skills. The last day to turn in a completed piece will be Saturday Oc-tober 23, 2021 at noon. The pieces will be judged by David Wayment and Leslie Wayment, both AFMS Judges. You will receive a written report from the judges about your piece, with attention to how you may improve your skills.

You may enter one level in each division, either Beginner or Advanced. If you have previously placed first in the beginner division, you may not enter it again and must move on to the ad-vanced division.

Sharon Jones will collect the finished pieces to deliver to the judges without identification on them. The pieces will be on display during the Parade of Gems, November 13-14, 2021. Vouchers for prizes will be awarded that have to be used at any of our dealer booths before the end of the show.

contain other metals for accents.

CM&GS Single Piece Competition Continued

Beginning Metalsmith

A bezel set ring with a 10x14mm stone. The stone may be a commercial stone and the exhibitor does not have to cut the stone. It should be constructed of Sterling Silver and may

Advanced metalsmith

Construct a signet ring containing a square or rectangular top with a stone, metal relief or engraving. It should be constructed of Sterling Silver and may contain other metals for ac-cents.

Beginning Cabochon

An 18x13 oval made from a 'Picture' type Jasper. Size will be judged against a template.

Advanced Cabochon

An unmounted, wearable, pendant size sail shaped cabochon made from Agate. See attached template examples for examples of sail shape. No exact dimensions required.

Beading

Make a necklace that incorporates Peyote stitch, either even or odd count. It must con-tain either 2 sizes or types of beads.

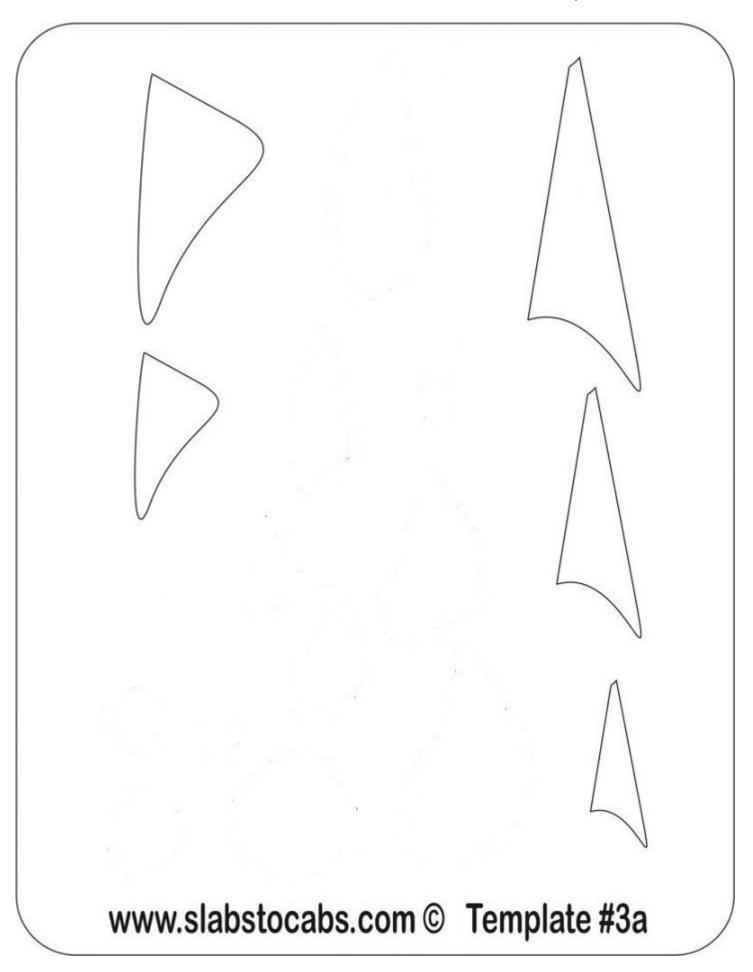
Beginning Faceting

Standard Round Brilliant with Horizontal Split Mains

This is a beginner pattern that is especially good with larger stones. Your stone must be a minimum of 8mm and not larger than 20mm. It contains 73 facets and 16 girdle facets. The pattern is provided. See Details on page 13.

Advanced Faceting

The pattern is Memory by Jeff R Graham and is provided. It is an intermediate level de-sign. It produces an 8 sided stone. Your stone must be a minimum of 10mm and not larger than 20mm. This pattern contains 81 facets and 8 girdle facets. It is best cut using light col-ored stones. NOTE: Cut the intermediate facets to center point. They won't all cut to the girdle. Just at the corners, cut all the way out to the points on the girdle. See Details on page 14.

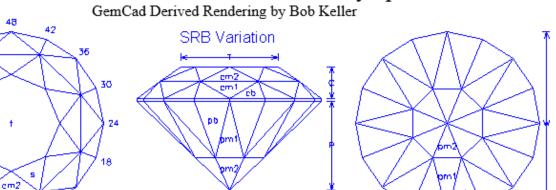


60

66

72

Standard Round Brilliant with Horizontally Split Mains



SRB Variation with Horizontally Split Mains

Horizontally Split Mains

Angles for R.I. = 1.54

96

73 facets + 16 facets on girdle = 89

8-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.528 T/L = 0.528 P/W = H/W = (P+C)/W+0.02 = 0.680 P/H = 0.528 P/W = 0.528 P/W = 0.528 P/W = 0.680 P/H = 0

0.487 C/W = 0.172

0.717 C/H = 0.253

Vol./W^3 = 0.227

Brightness at 0 degrees tilt for R.I. = 1.54COS = 34.7% ISO = 38.2%

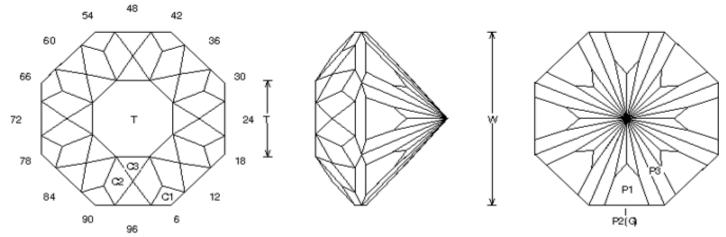
Pavilion

This variation of the SRB doubles the number of main facets from 8 to 16 by splitting them horizontally with the pairs of mains cut at the same index but different angles. The mains can be split on the pavilion only, crown only, or both. Adding more facets by splitting the mains increases the scintillation and is one way of adapting or scaling the SRB for use with larger stones.

The SRB Variation with Horizontally Split Mains Design File is available for GemCad users.

Memory by Jeff R. Graham

Check out the "Memory" Fire House Mug



Memory - designed by Jeff R. Graham jeff@faceters.com ©2003

Angles for R.I. = 1.54

81 facets + 8 facets on girdle = 89

8-fold, mirror-image symmetry

96 index

$$L/W = 1.000 \text{ T/W} = 0.440 \text{ T/L} = 0.440$$

H/W = 0.720

 $Vo1./W^3 = 0.269$

Brightness at 0 degrees tilt for R.I. = 1.54 81.4% Light Return

Pavilion

Cut to center point.

P2(G) 90.00 ⁹⁶⁻¹²⁻²⁴⁻³⁶⁻⁴⁸⁻⁶⁰⁻⁷²⁻

Cut to meet P1.

01-05-07-11-13-17-19-23- 25-29-31-35-37-41-

P3 41.00 43-47-49-53-55-59-61- C 65-67-71-73-77-79-83-

Cut to center point.

⊕ 85-89-91-95

Crown

C1	42.00	96-06-12-18-24-30-36-42-48-54- 60-66-72-78-84-90	Cut to meet P3 See Note. Cut to meet girdle.
C2	38.00	04-08-16-20-28-32-40-44-52-56- 64-68-76-80-88-92	Cut to meet girdle.
C3	32.00	96-12-24-36-48-60-72-84	Cut to meet C1.
T	0.00	Table	Cut to meet C2,C3.

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Club contacts

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The Canaveral Mineral and Gem Society meets the First Wednesday of each month at the Front Street Civic Center, Melbourne, Florida. The time of the Meeting is 7:00PM. Visitors are always welcome.

ON NEWSLETTER: MOONSTONE