"CUTTING REMARKS"

The Official Publication of the Old Pueblo Lapidary Club 520-323-9154

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The January General
Membership Meeting has been
cancelled. There will be a
General Membership Meeting
June 12th. Please check in
often for updates regarding
scheduling of meetings, labs,
and field trips. Some labs are
open again - see inside.







Articles or news to be included in the *Cutting Remarks* should be emailed to your Editor, Mike DeMeritt (**silverlininggemstones@gmail.com**), or feel free to call him at 520-455-5378 or (520) 240-5133. Submission deadline is the 20th of each month. Thanks!

See us online at: www.lapidaryclub.org

THE PREZ SEZ by Victoria Fila, President

Hello everyone, hope all are doing great and staying well.

With most getting vaccinated, the board has decided to try to have a general meeting June 12th. We are looking for a speaker; if we cannot secure a speaker, we will have a recorded presentation. Capacity will be limited to 55 and everyone needs to wear a mask. We will send out an email with the presentation. Coffee and soda will be available but we will not have snacks it will be bring your own snacks. We will be having the raffle and member's door prize.

All labs are running smoothly. We have increased the number of capacity to be inline with city ordinance of 50% capacity. Cab lab is up to 6, silver lab 5, faceting lab 5, and casting may stay low due to the size of the room.

March Silent Auction was a great success with a good selection and turn out. Thank you all who were able to attend. April Tailgate Sale went well and had a good turn out.

We are working to get back to normal. Full normalcy may not come until September. Once we are able to be back to our normal monthly gathering we will celebrate our 50th year anniversary and life celebration for the members we lost this past year.

Since we did not receive any volunteers to represent OPLC in the June 2021 AMF/ RMFMS Big Pinney convention in Wyoming, Jodi Brewster will be our proxy. They announced that they will be reading the names of all members for each club lost in this past year. I will be giving Jodi the list of our members.

Everyone stay safe and we will all be together soon.

Victoria Fila

OPLC President

Front Cover Pictures: May's Primary Birthstone is Emerald, or green-colored Beryl like this fine crystal on matrix. Malachite can occur as velvety crystals within the interior of a protected vug.

Cutting Remarks, Volume 2021, Issue 5, May 2021. Published monthly by the Old Pueblo Lapidary Club, 3118 N. Dale, Tucson, AZ 85712. Telephone: (520) 323-9154, a non-profit organization.

Current Lab Sessions as of 10/23/2020

Lab Sessions to be Re-Opened on a Limited Basis (be sure to read the rules before calling)

Cabbing:

Monday, 6 - 9 pm, Monitor: Donovan Wagner, (520) 869-2050

Tuesday, 9 -12 am, Call for dates. Monitor: Dan Lilly, (801) 995-9692

Tuesday, 3:30 – 6 pm, Leave message on phone. Monitor: Margarette Harris (520) 561-2315

Wednesday, 9 - 12 am, Monitor: Mark Davidson, (520) 975-6075

Wednesday: 6 - 9 pm, Monitor: Keith Haubert, (520) 784-8283

Thursday: 6 - 9 pm, Monitor: Tom Tuten, (803) 260-5423 Friday: 9-12 am, Monitor: David Schulte, (520) 954-8554

Saturday: 9:30 am - 2:30 pm, Call for dates. Monitor: Victoria Fila (520) 664-0302

Sunday: 10 am - 2 pm, Monitor: Gloria Shenanaquet, (520) 396-9715

Sunday: 2 - 5 pm, Monitor: Malcolm Currie, (360) 707-1360

Silver:

Tuesday 9 -12 am, Monitor: John Poole, (520) 555-7788

Wednesday 9 am - 1 pm, Monitor: Dennis Murphy, (520) 490-9188

Thursday 6pm - 9pm, Monitor. Bill Cascio

Friday 9 - 12 am, Monitor: Kim Knebel, (520) 873-8990

Saturday 9 am - 2 pm, Monitor: Jamie Germaine, (520) 288-0315

Casting:

Call Chuck Lundstrom at (520) 241-9262

Tuesday 9 -12 am, Monitor: Liz Williams, (818) 300-5262

Faceting:

Monday 9:00 - 12:00 am, Monitor: Dave Richardson, (520) 245-2172

Monday 1:00 - 4:00 pm, Monitor: Dave Richardson, (520) 245-2172

Monday 6:00 - 9:00 pm, Monitor: Rick Franz, (520) 401-6414

Wednesday 6:00 - 9:00 pm, Monitor: Dave Richardson, (520) 245-2172

Saw Room:

Call Mark Gibson (520) 297-4412 or Pete Peterson (520) 886-9021

For cutting times and procedures.

MAY GEMSTONE: EMERALD



6.84 Carat Fine Gem EmeraldFrom the Author's Collection

May's birthstone is the fabulous variety of Beryl known as *Emerald*. Beryl forms commonly as simple, prismatic, hexagonal crystals, whose prism faces are often vertically striated or grooved. It has indistinct cleavage on the basal {0001} plane, and conchoidal or uneven fracture. Hardness varies from 7.5 - 8.0 on the Moh's Scale, with relatively-fragile emerald usually coming in closer to 7.5. It has a density of roughly 2.7. It has a vitreous luster, is transparent to translucent, and large crystals can vary in transparency. This is especially true with emerald, whose formation happens in such violently magmatic conditions as to virtually assure a variety of inclusions (emeralds are known for their *Jardin*, a French word for "Garden"-the mass of inclusions leaves the impression of a painted garden landscape...)

As I explained for Aquamarine (another form of beryl) in the March issue, the crystal structure of beryl is characterized by sixfold

rings of [SiO4] tetrahedra that lie on top of each other and thus form endless channels along the *c*-axis of the crystal. The rings are linked by [BeO4] tetrahedra and [AlO6] octahedral. In addition to the main elements of beryl, minor amounts of Li, Na, or other alkyloid metals can be present (like H2O or CO2, they can be accommodated in the channels.) Color is caused by chromophores in the form of transition elements, and typically, Chromium (as Cr3+) is responsible for the deep-green in emerald. Vanadium may also act as a chromophore, either by itself, or in concert with the Chromi-

um. Though Iron may color beryl green, it is not considered an emerald unless the chromophore is Chromium or Vanadium (Iron-green beryls are simply called "Green Beryl" or even labeled as aquamarines...) With aquamarines, the crystals are often long; by contrast, pink beryl (Morganite) typically assumes short, stubby, tabular crystals. Emerald falls in between these ranges, with mostly shorter, smaller crystals that are very rarely tabular.

Most beryl is found in granitic pegmatites, but emerald is an exception - it most frequently occurs in mica-schists, or veins and cavities in bituminous limestone (like the famous emerald mines of Muzo, Columbia.)



Emerald Rough from Muzo, Columbia

Emerald is found in few places, and important deposits include Muzo and Chivor, Columbia; Bahia and Goias, Brazil; Pakistan; Afghanistan; and Hiddenite, North Carolina. There are African deposits as well, though many of these really only produce green beryl (colored by Fe2+). Fine, gem-quality emeralds are exceptionally rare, and rank among the most expensive and sought-after

-Written/Compiled by Mike DeMeritt, 2013

of all gemstones. Those with May birthdays couldn't be prouder!

MAY CUTTING TIPS

Bulk Facet Rough Removal that helps satisfy yield. Any facet machine can double as a saw. Locate a large steel washer or bushing to use as a spacer. Install a standard girdling lap as a base, then your spacer, followed by a standard diamond sawblade horizontally. Using careful adjustments to the mast, cut your preform to just over-size, saving the larger removed pieces. With some machines, you can increase the number of spacers if necessary to allow larger material removal. With some careful pre-planning, you can cut near-perfect performs, as well as save the bulk of any waste (you can always cut some matching stones from these...) Best of all, your grinding laps will last much longer than before!

Off on a tangent... Ever had a design plan for a given material, but want the design in something different? If you don't work out your facet angles with a tangent ratio formula, there's a good chance you are losing some of the potential brilliance of your stone. If you arbitrarily add to or subtract from given angles (as many do...), the optical properties of the cut can be altered dramatically (and typically not in a good way!) The best way to avoid this is to change the angles tangentially in relation to the new material's critical angle, which keeps the integrity of the design's plan view. All you need is a scientific calculator with a Tangent button ("TAN"), an Inverse button (sometimes called "SHIFT" or "INV"), and a method by which to store a number in memory (for my example I'll use the typical "M+" and "MR" functions on most calculators...) Example: You have a cool design for CZ that you'd like to cut an amethyst out of. The pavilion main angle for CZ is 40.6 degrees; for quartz it is 43.2 degrees. Here's how it works:

- 1.) Enter the new (quartz) angle: 43.2
- 2.) Press TAN (0.9391)
- 3.) Press I (divide)
- 4.) Enter the original (CZ) angle: 40.6
- 5.) Press TAN (0.8571)
- 6.) Press = (1.0956) This number will remain in Memory Recall (after step 7) unless you negate it. It is necessary for further calculations beginning with Step 8.
 - 7.) Press M+ (1.0956 goes into memory...)
 - 8.) Enter any known original (CZ) angle pavilion break, i.e. 41.7
 - 9.) Press TAN (0.89097)
 - 10.) Press x (multiply)
 - 11.) Press MR (1.0956)
 - 12.) Press = (0.97616)
 - 13.) Press INVERT or SHIFT
- 14.) Press **TAN (44.3)** This number is your new corresponding pavilion break angle for quartz.

Use this method for any other corresponding angles that need to be figured, including all crown angles. The angles will be precisely correct for the plan form with the new critical angle. Your stones will sparkle in agreement! *Provided by Mike DeMeritt*, 2012



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OPLC Members should check the

Facebook page of the Old Pueblo Lapidary Club Lab Monitors Group https://www.facebook.com/groups/335450367346008 for current lab times and days



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WELCOME NEW MEMBERS



Anna Hardenberg Debby McPeters Russell McCulley Sandra Day Prout John Babcock Corinne Babcock Tony Allen Elijah Allen Joe Waktins Robin Isaacs

Pauline Martz
Aaron Oldham
Tucker Davis
Greg Abate
Abi Denninghoff
Toby Rupel
Alexandra May
Taylor Nakakihara
Sarah Dale

Creativeness often consists of merely turning up what is already there. Did you know that right and left shoes were thought up only a little more than a century ago?

Bernice Fitz-Gibbon

DONATIONS

The following donations were received this month:

NO DONATIONS THIS MONTH

Thank you to all that have made donations to help keep this club running!

We are still receiving donations if you have lapidary related items. Please contact

Dave Richardson at 520-245-2172 to arrange a pickup or drop-off.

Allen's Treasure House

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www.allens-treasure-house.com

4313 E Grant Road (near Columbus); Tucson AZ 85712; (520) 326-5550; mail@allens-treasure-house.com

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Beta Diamond Products, Inc.

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Beta Diamond Products would like to thank Old Pueblo Labidary Club members for choosing our diamond consumables for their polishing and faceting needs. Beta Diamond Products has been in business since 1986 supplying the faceting community with

the best U.S. micronized diamond on the market. Use our diamond powder and diamond spray – club favorites! Ask other members about our excellent quality, delivery and price.





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Ad Expires May 2016

Ad Expires June 2017



OPLC Members Receive 10% off select merchandise, And 3-ounce price break on all silver purchases!

Ad Expires June 2015

MONEY SAVING DISCOUNTS

- <u>DAH Rock Shop</u> 10% on most items, \$10 minimum purchase. 520-323-0781
 3401 Dodge Blvd, Tucson
- <u>Colorwright</u> (928) 862-4120, Web address: http://www.color-wright.com/, MAILING AD-DRESS: . 2160 Shelby Road, Suite 101, Sedona AZ 86336. Amount of discount depends on item(s) being purchased.
- <u>Jay's of Tucson</u> 30% discount excluding orange tag items, sterling silver sheet and wire. 520-323-1123 (**4813 E Speedway in Pinecrest Center**) **4627 E Speedway, Tucson**
- Jed's Rock Shop 20% on all items. 520-882-6044 6275 N Sandario Rd, Tucson
- Copper City Rock Shop See ad in this issue. 10% discount with ad. 928-425-7885
 566 Ash, Globe, AZ 85501
- Kent's Tools 10% discount. 520-461-1350 2745 N 1st Avenue, Tucson
- <u>Tucson Mineral & Gem World</u> 10% 520-883-0682 Web address: www.tucsonmineral.com **2801 South Kinney Road, Tucson**
- <u>Arizona Lapidary</u> Arizona Lapidary & Gem Rough 10% Discount off rough rock 520-399-6641
 7320 E Broadway Blvd, Tucson
- <u>Silver Lining Gemstones</u> 20-35% discount on most items. 520-203-8430, or see Mike DeMeritt at any of his labs. Includes Instagram Store (IG Name **silverlininggemstones**)
- <u>Starr Gems</u> 10% Discount on select merchandise, and 3-ounce price break for all silver purchases. See ad in this issue. **220 W Drachman, Tucson**

DON'T FORGET

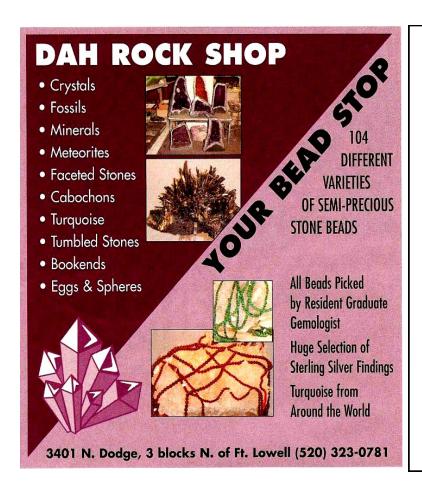
Please don't forget to continue to bring in <u>YOUR</u> (or anyone else's for that matter) aluminum cans to the Club for recycling. Your contribution would be greatly appreciated to help add \$'s to the Club's treasury. **Thanks!**

Rate Schedule for Advertisements - - - Ad Sizes & Prices

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1/2 page - 4 1/2" H by 7 1/4" W \$96.00 per year \$8.00 per month Full page - 9 1/2" H by 7 1/4" W \$168.00 per year \$14.00 per month



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Pete Petersen 886-9021

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Helen Serras-Herman 761-9907

CLASSES

Victoria Fila 664-0302

FIELD TRIPS (COMMITTEE)

Victoria Fila 664-0302

HISTORIAN

Twink Monrad 297-9454

JUNIOR EDUCATION

OPEN - NEED VOLUNTEER!

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Kim Filips 743-8070

KITCHEN

General Membership

LIBRARIAN

Bill Cascio 638-8144

MEMBERSHIP

Janet Keisler 333-3398

SECURITY

John Poole 777-5588

SILENT AUCTION

Dave Richardson 245-2172

BUSINESS MEETING REFRESHMENTS

Twink Monrad 297-9454

Victoria Fila 664-0302

SILENT AUCTION

Dave Richardson 245-2172

NEWSLETTER

Mike DeMeritt (520) 455-5378

NOTE: SEE PAGE 3 FOR COVID-19 LAB SCHEDULING

WEEKLY WORKSHOP SCHEDULE Phone 323-9154

Mondays

9AM - Noon Faceting Lab & Class

Monitor - Dave Richardson 245-2172

9AM- 3:30PM Cabbing

Monitor - John Watt 520-247-6811

1PM - 4PM Silversmith Lab

Monitor - Pat Droll 345-2792

1PM—4PM Faceting Lab & Class

Monitor - Dave Richardson 245-2172

3:30PM - 6PM Cabbing

Monitor - Margarette Harris 561-2315

6PM - 9PM Faceting Class

Monitor - Earl Zoeller 886-3518

6PM - 9PM Cabbing**

Monitor - Donovan Wagner 869-2050

6PM - 9PM Silversmithing Lab

Monitor - Bill Penrose 780-1143

Tuesdays

9AM - Noon Cabbing*

Monitor - Mike DeMeritt 520-455-5378

9AM- Noon Casting

Monitor - Liz Williams (818)300-5262

9AM - Noon Silversmithing Lab

Monitor - John Poole 777-5588

Wednesdays

9AM - 1PM Silversmithing

Monitor - Dennis Murphy 490-9188

3PM - 6PM Rock Sawing

Monitor - Steve Lutes 320-360-4329

6PM - 9PM Cabbing

Monitor - Keith Haubert 784-8283

6PM—9PM Faceting Lab & Class

Monitor - Bob Powell 403-8980

Thursdays

9AM - Noon Rock Sawing

Monitor - Pete Petersen 886-9021

9AM - Noon Cabbing

Monitor - Bob Powell 403-8980

1PM - 4PM Silversmithing

Monitor - Giac D'Aquisto 207-6219

6PM - 9PM Silversmithing

Monitor - Bill Cascio 638-8144

6PM - 9PM Cabbing

Monitor - Tom Tuten 803-260-5423

Fridays

9AM - Noon Cabbing**

Monitor - David Schulte 954-8554

9AM—Noon Silversmithing

Monitor - Kim Knebel 873-8990

1PM - 4PM Silversmithing

Monitor - Lou Ackerman 290-6968

1PM - 4PM Cabbing

Monitor - Pete Valentine, 208-409-7910

<u>Saturdays</u>

9AM - 2PM Silversmithing

Monitor - James Germaine, 288-0135

9AM - 2PM Cabbing

Monitor - Ron Bryan 619-495-7967

Casting Class

Monitor - Chuck Lundstrom 241-9262

Investing second Saturday of every month 12 - 3

Casting pour third Saturday of every month 3PM until finished.

Sundays

9AM - Noon Rock Sawing

Monitor - Mark Gibson 297-4412

10AM - 3PM Silversmithing Lab

Monitor - Giac D'Aquisto 207-6219

10AM - 2PM Cabbing

Monitor - Gloria Jean Shevanaquet 369-7225

2PM - 5PM Cabbing

Monitor - Malcolm Currie

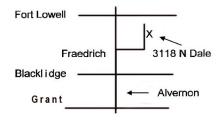
INSTRUCTION AS AVAILABLE

** FIRST TWO MON/FRI OF EVERY MONTH IS CAB-OCHON CLASS, WHILE THE OTHERS ARE OPEN LAB Old Pueblo Lapidary Club (Cutting Remarks - May 2021) 3118 N. Dale Tucson, AZ 85712 (520) 323-9154

OPLC Membership Application Complete form can be downloaded at: lapidaryclub.org/join_us.shtml

Name1	Name 2		Date		-
Local Address					
City	State Zip Code		Phone number ()
Email address	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	Summer Dates: From		To
Summer Address					
City	State		Zip Code		
Type of membership: Single Member Couple (same address) Junior	1st Quarter \$30.00 \$40.00 \$14.50	2nd Quarter \$23.00 \$30.00 \$11.00	3rd Quarter \$16.00 \$23.00 \$9.00	4th Quarter \$11.00 \$16.00 \$6.00	Annual Renewals \$25.00 \$30.00 \$12.00

Mail to: Membership Chairperson, Old Pueblo Lapidary Club, 3118 N. Dale, Tucson, AZ 85712



The Business Meetings are held on the 2nd Saturday of each month. A pre-meeting social hour (except for the December meeting) is at 8:00 a.m., followed by an educational program, and ends with the monthly meeting. Visitors are most welcome.