



# Goldrush Ledger

Charlotte Gem & Mineral Club Newsletter

October 2019

## Prez Sez.....

Happy Fall! We've got lots of things going on: Club officer election nominations are due by the October Meeting. Several officer positions will be open; please consider serving on the Board in some capacity. Officer positions are shown on the next page.

There has been an ongoing interest in re-opening the workshop for classes on cabochon, faceting, and jewelry-making. We are in the process of looking for an affordable site that will suit our needs.

We have secured a location for our April 2020 DMC field trip — more details at our October meeting.

Kim Deacon gave an awesome presentation in September on his extensive travels with rockhounding. He showed us some of the unique locations he has visited and great finds that he has made through the years. Thanks Kim!

Our October speaker will be Greg Van Hoet, on how to do photography with gemstones.

Planning ahead: Our club auction will be in November. If you have any items to donate for the auction please let Brad or me know. Mark your calendars for our year-end party on December 7.

Hope to see you at the next meeting!

**Kim Gwyn**  
**Club President**  
**Charlotte Gem & Mineral Club**

*You might be a rockhound if...*

*-- You are thinking about  
giving out specimens  
for Halloween!*



## In This Issue

- Recent finds!
- Digs and Shows
- More on Faceting!



## 2019 CGMC Officers & Board

### **President**

Kim Gwyn  
gwynkim@gmail.com  
(803)370-0244

### **Vice President**

Martha Rogers

### **Secretary**

Vickie Glover

### **Treasurer**

Sam Baker

### **Directors at Large**

Brad Glover  
Mary Fisher  
Anne Lockwood

### **Past President**

Murray Simon

## Club Chairpersons

### **Web Master**

Kim Gwyn  
gwynkim@gmail.com

### **Newsletter Editor**

Mary Fisher

### **Geode Chair**

Jimmy Strickland

### **Speakers/Special Events**

Anne Lockwood

### **Contact Info:**

Charlotte@gem@yahoo.com

## New Gemstone Discovery: Carmeltazite

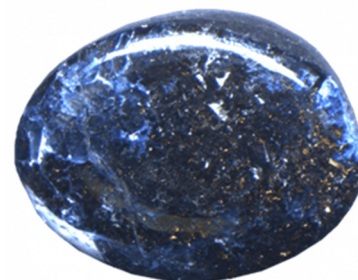
Article and photo credits: instoremag.com, allthatsinteresting.com, and Shefa Yamim



Shefa Yamim, a precious stone exploration company in Israel, has discovered a new mineral that is harder than diamond and which has never been found on Earth before. The material is called carmeltazite, and it was recently approved as a new mineral by the International Mineralogical Association Commission on New Minerals, Nomenclature and Classification.

It is typically black, blue to green, or orange-brown in color and was created by volcanic blasts in Cretaceous, dinosaur-ruled Israel along the Carmel crest where there were some 14 volcanic vents constantly spewing out lava that eroded and flooded the Mediterranean.

Carmeltazite is similar in appearance and chemical composition to ruby and sapphire but is yet unlike any other sapphire found in the world. In fact, the mineral has otherwise only been identified in outer space.



The mineral was named carmeltazite because of its discovery on Mount Carmel and due to its major chemical components: titanium, aluminum and zirconium ("TAZ"), the company stated in a press release. Shefa Yamim trademarked the name "carmel sapphire" for the material.

The mineral "is a newly discovered type of corundum similar in appearance to the corundum, but unlike any other sapphire found in the world," according to the company. The largest stone found to date is 33.3 carats.

## Next Club Meeting

Thursday, October 17, 2019

Social Time at 6:30 PM

Meeting at 7:00 PM

Tyvola Senior Center  
2225 Tyvola Road, Charlotte



# Charlotte Junior Rockhounds

## Children's Club for Rocks!

The Junior Rockhounds have kicked off again this year, with an Open House meeting in September. The next meeting will be held on October 19, with Fluorescent Minerals (Rocks that Glow in the Dark!)

If you're interested in having your kids join in, please send an email to Mary Fisher at [CharlotteJuniorRockhounds@gmail.com](mailto:CharlotteJuniorRockhounds@gmail.com) to get on the communication list.

## Upcoming Field Trips

### Dixie Mineral Council Field Trips

Note: DMC Field Trips are for club members of DMC-affiliated clubs and their families only. Liability issues mean that these trips cannot be attended by the general public unless otherwise noted. Because this dig is not open to the public, full details are not published in our newsletter. As a benefit of membership, our club is a DMC-affiliated club and CGMC members who are current on their 2019 dues may attend.

### October 12

#### An Official Field Trip of the Memphis Archaeological & Geological Society (Memphis, TN)

Quarry site in Mississippi with chert gravels containing fossils, petrified wood, agate, conglomerate and quartz.

### Later this Year

<b>November</b>	Pendleton District Gem & Mineral Society (Seneca, SC)
<b>December</b>	Emerald City Rock and Gem Club (Greenwood, SC)

For more information about these digs, please contact [charlottegem@yahoo.com](mailto:charlottegem@yahoo.com).

## Upcoming Gem Shows

### Columbia, SC Gem Show

**November 22-24**—Columbia Gem and Mineral Society. Jamil Temple (206 Jamil Road, Columbia SC ) Open Friday, Saturday and Sunday. In 2019, there will be more than twenty-five dealers and they will have an enormous variety of materials from rough and cut gemstones, beads, fossils, finished jewelry, wire wrapping, lapidary supplies, and excellent mineral specimens. We will have dealers that carry amber, jade, gold, all precious gemstones, and several jewelers who can complete special orders, and much, much more. The club will have geodes, a salted gem mine, and grab bags for sale.

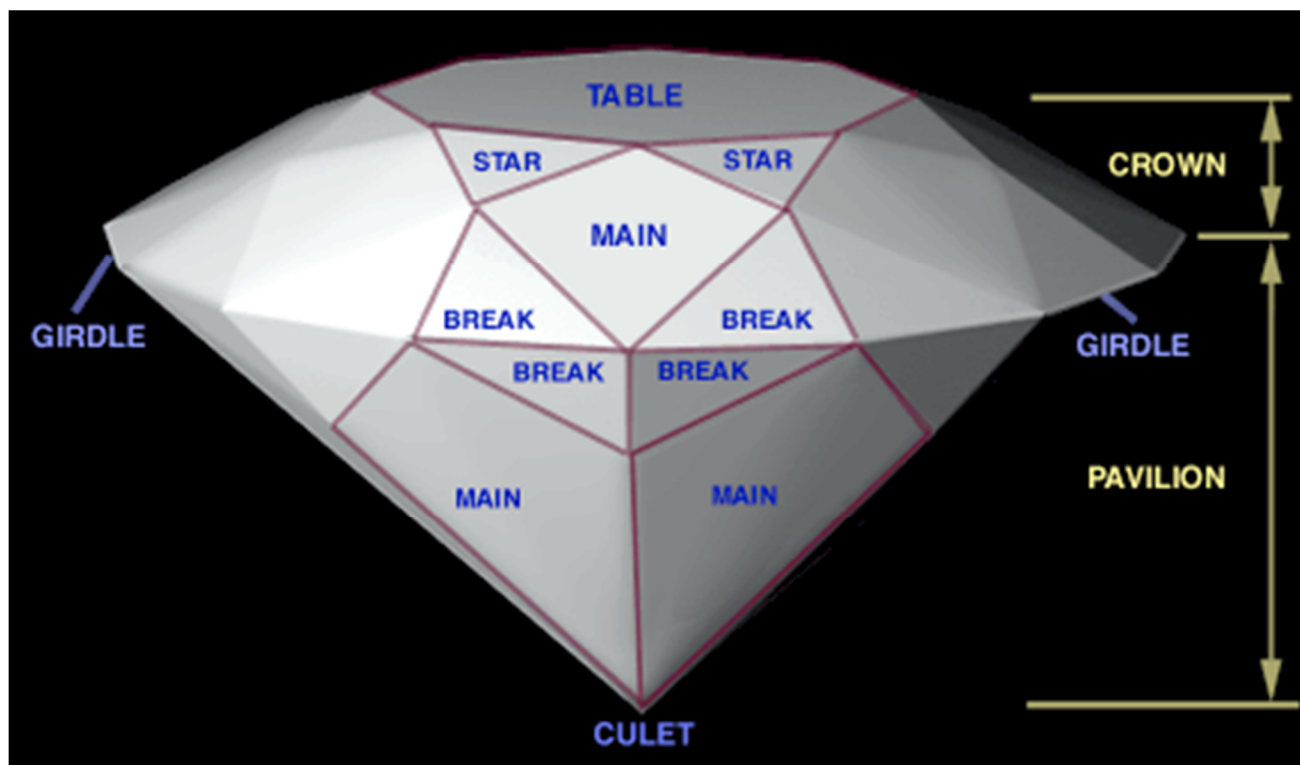
## Faceting Series —Continued

This series is a collection of information from Ron Gibbs, a longtime Charlotte Gem and Mineral Club member who passed away in 2013. His contributions internationally to the world of gem and mineral collecting, and to our club in particular, will not soon be forgotten.

Source: Ron's website, [www.theimage.com](http://www.theimage.com)

### Faceting Basics

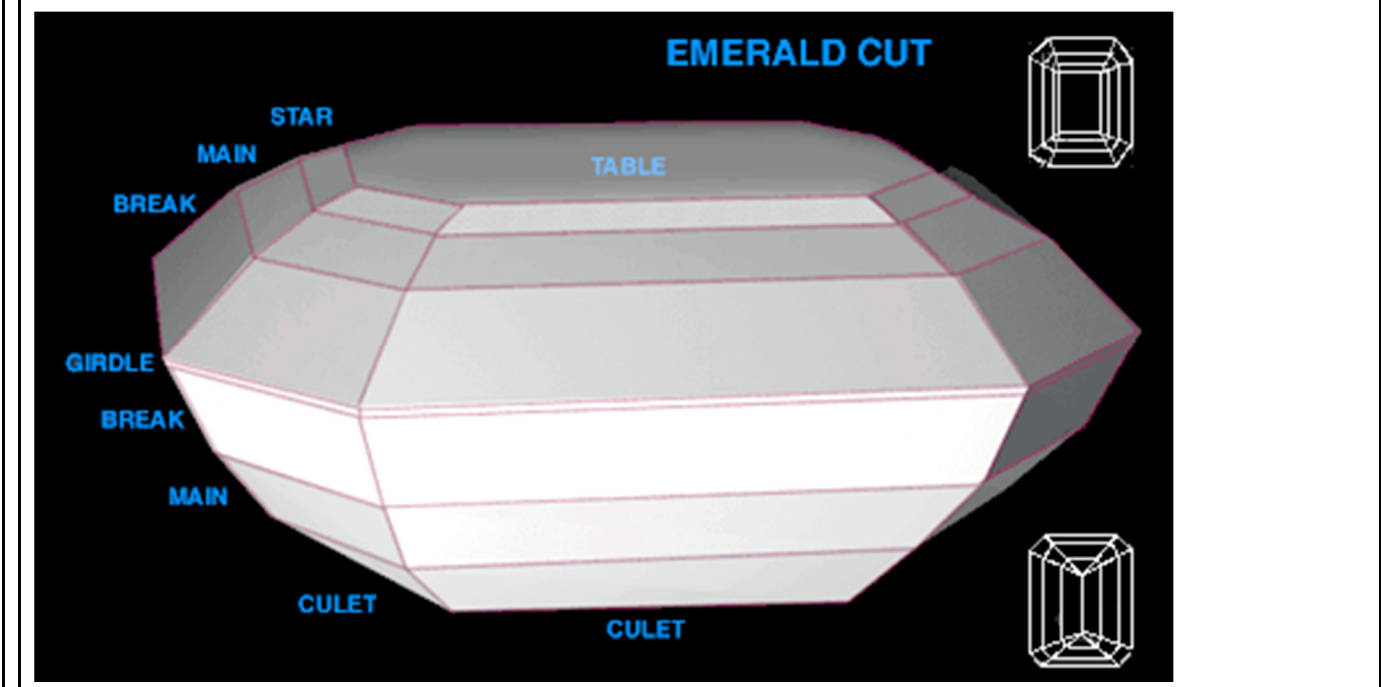
#### Terminology for Faceting



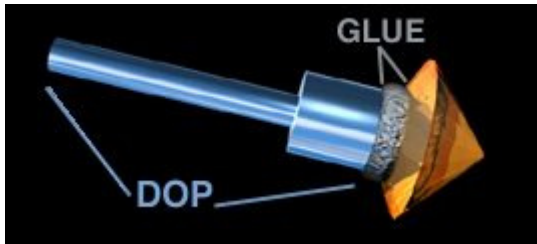
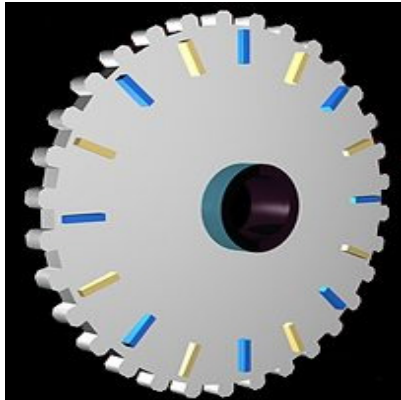
**57 facet Round Brilliant**

Crown	Top half of stone, the part above the girdle.
Pavilion	Bottom half of stone, the part below the girdle.
Girdle	The line dividing the top from bottom.
Table	Large facet on the top of the stone.
Culet	The tip at the bottom of the stone
Main (Pavilion)	One way to define the main is to say that it is the facet cut at the culet angle, and other pavilion facets will be cut at angles +/- this set. On some stones the culet MAIN is the facet that terminates at the culet. Another thought, its simple one name for a facet that aids in differentiating it from others when creating a faceting (cutting) diagram.
Main (crown)	Same as MAIN in pavilion only it is in the Crown. Also usually the facet that the start angle is cut from. All other calculated from it.
Break (pavilion or crown)	Facets found on each side of the MAINS, usually 2 times as many as the mains. They usually begin at the girdle and move toward the top or bottom of the stone depending on their type.
Star	Facets around the edge of the table that also contact the MAINS.

Faceting Terminology—continued
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## 45 facet Emerald Cut

Critical Angle	The angle at which the majority of light is reflected back into the stone. Cutting below this angle produces a "window effect" and there is more light lost than reflected back.	
Culet Angle	The angle that the MAIN CULET facet will be cut, and the angle used to calculate the other culet facets. These angles are not constants, rather they are guides. Starting points from which to work. They should always be greater than the Critical Angle.	
Crown Angle	The angle that the MAIN CROWN facets will be cut and the angle used to calculate the other crown facets. These angles are not constants, rather they are guides. Starting points from which to work. They should always be greater than the Critical Angle.	
Dop (Stick)		The rod or stick to which the rough material is affixed before beginning faceting. The DOP is used to control the rough material while it is being converted to a cut stone.
Index Gear		The index gear is used to determine the placement of facets around the stone. It is used to define the symmetry of the stone. The gear has teeth cut around the edge and they are used to align and fix the gear in set positions.  Illustrated is a 32 tooth gear and it can cut any symmetry that is evenly divided into 32. Hence you can cut 4 side stones, 8 sided stones, and 16 or 32 sided stones. It cannot be used to cut 3, 5, or 6 sided stone as none of these is evenly divisible into 32.

